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ABSTRACT

This is a response booklet for students using SMSG high school programed text materials. The response sheets are arranged by section and the spaces provided for answers are blocked to correspond to blocks of questions in the text. (MP)

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SE 025 142

School Mathematics Study Group

Programed First Course in Algebra

Revised Form H

Unit 62

Programed First Course in Algebra

Revised Form H

Student's Response Booklet

Prepared under the supervision of the
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Stanford, California
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Name ______________________ Date ______________

1-1. Sets and Subsets

1. __________
2. __________
3. ____________________
4. __________

5. ______________
6. __________

7. ______
8. ______________
9. ______

10. A B C (Circle your choice)

11. ______
12. ______________
13. __________
14. ____________________________
15. ____________________________

16. __________
17. __________
18. __________
19. __________
20. __________
21. __________
22. __________
23. __________

24. A B C (Circle your choice)

25. A B C (Circle your choice)

26. A B C (Circle your choice)

27. A B C (Circle your choice)

28. A B C (Circle your choice)

29. A B C (Circle your choice)

30. __________
31. __________
32. __________
33. __________
34. __________

35. A B C D (Circle your choice)

36. A B (Circle your choice)

*37. __________
*38. __________
*39. __________
*40. __________
*41. __________ __________
*42. __________

*43.

Name ____________________________________ Date ________________________

1-2. The Number Line

1.

2. ________ ________

3. ________

4. A B C D (Circle one)

5. ________

6. ________________

7. __________________________

8. ________

9. ________________

10. __________________________

11. ____________ ____________

12. ____________

13. ____________

14. ____________

15. ____________

16. ____________

17. ________________

18. ________________

19. ________________

20. ________________

21. ________________

22. A B C D (Circle one)

23. ________________

24. ________________

25. ________________

26. __________ __________

27. ________________

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40. ____________

41. ____________

42. ____________ ____________

43. __________________

44. __________________

45. __________________

46. ____________ of ____________

47. ____________________

48. ______________

49. ______________

50. ______________

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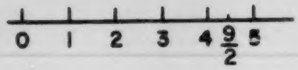

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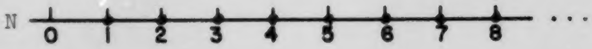

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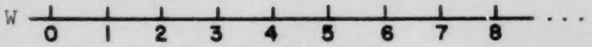

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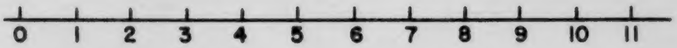

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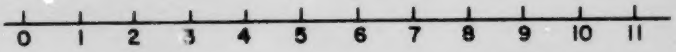
10
11

62.


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6
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8
9
10
11

63.

64. A B C (Circle one)

65. A B C (Circle one)

66. ____________________

67. ______________

68. ____________________

69. ______________

70. ____________________

71. A 1 2 3 4 5 6

B 1 2 3 4 5 6

72. ___________________________

73. __________

74. __________

75. __________

76. __________

77. __________

78. ____________________

79. ____________________

80. ____________________

81. ____________________

82. ______________ ______________

83. ____________________

84. ______________ ______________

*85. ______________

*86. ______________ ______________

*87. ______________

*88. _____________________________

*89. ______________

*90. ______________

*91. ______________

*92. ______________

*93. ______________

94. ______________

95. ______________

96. ______________

97. ______________

98. ______________

99. ______________

100. A B (Circle one)

101. A B C (Circle one)

Name ________________________________ Date ____________________

1-3. Addition and Multiplication on the Number Line

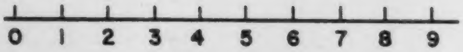
1. ______________

2. __________

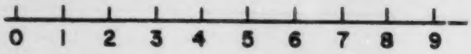
3. ______________

4. __________

5.


0 1 2 3 4 5 6 7 8 9

6.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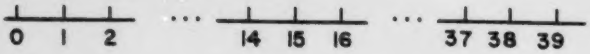
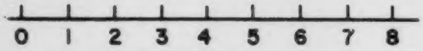
7.


0 1 2 ... 14 15 16 ... 37 38 39

8.



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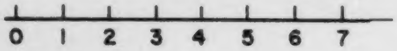

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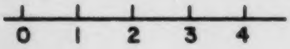
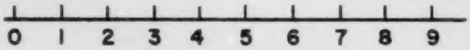


11. __________

12. __________

13.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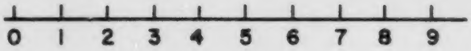
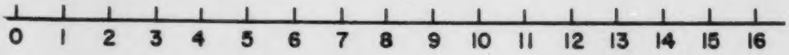
14.


0 1 2 3 4 5 6 7 8 9

15.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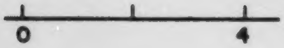
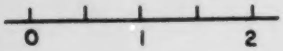
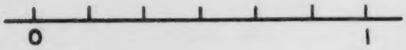
*16. ______________________

*17. ______________

*18. 

*19. 

*20. 

21. ____________________

22. ____________________ ____________________

23. ________________________________

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25. _________________________ ____________________

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38. _________________________ ________________________

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*41. __________________________

*42. ________________________________

*43. __________

Name ______________________________ Date ____________________

2-1. Numerals and Numerical Phrases

1. ____________
2. ____________
3. ____________
4. ____________
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34. ____________
35. ____________
36. ____________
37. ____________
38. ____________
39. ____________
40. ____________
41. ____________
42. A B C D (Circle one)
43. ____________
44. ____________
45. ____________
46. ____________
47. ____________
48. ____________

49. ____________________

50. ____________________

51. ____________________

52. ____________________

53. ____________________

54. A B C (Circle one)

55. A B (Circle one)

56. ____________________

57. ____________________

58. ____________________

59. ____________________

60. ____________________

61. ____________________

62. ____________________

63. _________________________

64. _________________________

65. ________________

66. ________________ _________________

67. ________________

68. _________________________

69. ___________________________________

70. ___________________________________

71. ___________________________________

72. ___________________________________

73. ___________________________________

Name____________________ Date________________

2-2. Some Properties of Addition and Multiplication

1. __________
2. ____________________
3. ____________________
4. ____________________

5. __________
6. __________
7. __________
8. _______________
9. _______________
10. __________
11. __________
12. __________
13. _______________
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16. _______________
17. _______________
18. _______________

19. ____________________
20. ____________________

21. ____________________
22. ____________________
23. ____________________
24. ____________________

25. _______________
26. __________ of __________
27. ________ ________ of ________

28. A B C D

29. A B C D

30. __________
31. __________
32. __________
33. __________ __________
34. __________

35. __________
36. __________

37. ____________________
38. ____________________
39. ____________________

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51. ______________
52. ___________________________

53. ___________________________
54. _________________
55. _________________
56. _________________
57. _________________

58. _________________
59. _________________
60. _________________
61. _________________
62. _________________
63. _________________

64. ____________ property of ____________
65. ____________ property of ____________
66. ____________ property of ____________
67. ____________ property of ____________
68. ____________ property of ____________
69. ____________ property of ____________

70. _____________________
71. _____________________
72. __________

73. _____________
74. _____________
75. _____________
76. _____________

Name________________________________ Date____________________

2-3. The Distributive Property

1. __________
2. ______ ______
3. ______ ______
4. __________
5. __________
6. ______________
7. ___________ _______
8. ______________
9. ______________
10. ______________
11. ______________

12. ______________ _______
13. ______________
14. ______________
15. ______________
16. __________________________
17. _________
18. _________
19. _________
20. _________
21. ______________
22. _________

23. A B

24. __________________
25. __________________
26. __________________
27. __________________
28. __________________

29. __________________
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31. __________________
32. __________________

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34. __________________

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58. ________

59. ________

60. ________

61. _____________________

62. _____________________

63. _______________

64. ________

65. ________

66. _____________________

67. ________

68. A B C

69. _____________________

70. ________

71. ________

72. ________

73. _____________________

74. _____________________

75. _____________________

76. ________________

77. ________________

78. ________________

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92. ______________

93. ________

94. ________

95. ________

96. ________

97. ________

98. ___________

99. ________

100. ________

101. ________

102. ______

103. ______

104. ______

105. ______

106. ______

107. ______

Name______________________________ Date____________________

2-4. Variables

1. __________
2. __________________

3. ______________
4. __________________
5. ______________
6. _______________________
7. __________________

8. __________________

9. ___________
10. __________________
11. __________________
12. _______________________
13. _______________________
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16. __________________
17. __________________
18. __________________
19. ________

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30. ______________

31. ______________
32. ________ _________
33. ________ _________

34. ________ ________ ________
35. ________ ________ ________
36. ________ ________ ________
37. ________ ________ ________

38. _________________
39. _________________
40. __________ ___ ___________
41. _________________
42. _________________

43. ____________
44. ____________
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53. ____________

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56. ____________
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59. ____________
60. ____________
61. ____________
62. ____________

Name ______________________________ Date ____________________

3-1. Open Sentences

1. ____________
2. ____________
3. ____________
4. ____________
5. ____________

6. ____________
7. ____________
8. ____________
9. ____________
10. ____________
11. ____________

12. ____________
13. ____________
14. ____________
15. ____________

16. A B C D E

17. ____________
18. ____________
19. ____________
20. ____________
21. ____________
22. ____________

23. A B C D

24. A B C

25. ____________
26. ____________
27. ____________
28. ____________
29. ____________
30. ____________
31. ____________
32. ____________
33. ____________

34. ____________
35. ____________
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39. ____________
40. ____________
41. ____________
42. ____________
43. ____________

44. ____________
45. ____________
46. ____________
47. ____________
48. ____________

49. A B

50. ____________
51. ____________
52. ____________
53. ____________
54. ____________
55. ____________
56. __________________________
57. __________________________
58. __________________________
59. __________________________

60. A B C

61. ____________
62. ____________
63. ____________
64. ____________
65. ____________
66. ____________
67. ____________________________
68. ____________
69. ____________
70. ____________________________

71. ________________
72. ________________
73. ________________

Name ______________________________ Date ________________

3-2. Truth Sets of Open Sentences

1. __________
2. __________
3. __________
4. __________
5. __________
6. __________
7. __________
8. __________
9. __________
10. __________
11. __________
12. __________________
13. __________________
14. __________________
15. __________________
16. __________________

17. A B C

18. __________
19. __________
20. __________
21. __________
22. __________________
23. __________

24. A B

25. Open sentence:

____

Truth set: ______________

Answer: ______________

26. Open sentence:

____

Truth set: ______________

Answer: ______________

27. Open sentence:

____

Truth set: ______________

Answer: ______________

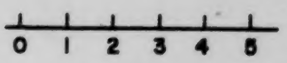
28. Open sentence:

____

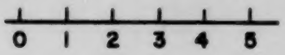
Truth set: ______________

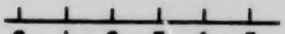
Answer: ______________

29. ______________________

30. 

31. ______________________

32. ______ 

33. ______ 

34. ______

35. A B C D

Truth Set **Graph**

36. ______________________________

37. ______________________________

38. ______________________________

39. ______________________________

40. ______________________________

41. ______________________________

42. ______________________________

43. ______________________________

44. ______________________________

45. ______________________________

0 1 2 3 4 5 6
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0 1 2 3 4 5 6
0 1 2 3 4 5 6
0 1 2 3 4 5 6
0 1 2 3 4 5 6
0 1 2 3 4 5 6
0 1 2 3 4 5 6
0 1 2 3 4 5 6
0 1 2 3 4 5 6

Name ____ Date _________________________

3-3. Sentences Involving Inequalities

1. ____________
2. ____________
3. ____________
4. ____________
5. ____________

6. ____________
7. ____________
8. ____________
9. ____________
10. ____________
11. ______________________

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53. ______________________

54. ____________________________

55. ______________________

56. _____________

57. _____________

58. _____________

59. _____________

60. _____________

61. ________________

62. 0 1 2 3 4 5 6 7

63. 0 1 2 3 4 5 6 7

64. 0 1 2 3 4 5 6 7

65. 0 1 2 3 4 5 6 7

66. 0 1 2 3 4 5 6 7

67. 0 1 2 3 4 5 6 7

68. 0 1 2 3 4 5 6 7

69. 0 1 2 3 4 5 6 7

70. 0 1 2 3 4 5 6 7

71. 0 1 2 3 4 5 6 7

72. 0 1 2 3 4 5 6 7

73. 0 1 2 3 4 5 6 7

74. 0 1 2 3 4 5 6 7

75. 0 1 2 3 4 5 6 7

76. ___________

77. ____________________________

Name ______________________________ Date __________________

3-4. Compound Sentences

1. A B C D

2. ____________
3. ____________
4. ____________
5. ____________
6. ____________

7. A B C

8. ____________
9. ____________
10. ____________
11. ____________
12. ____________

13. ____________
14. ____________
15. ____________
16. ____________
17. ____________
18. ____________

19. ____________
20. ____________
21. ____________
22. ____________
23. ____________
24. ____________

25. ____________
26. ____________
27. ____________

28. A B

29. ____________
30. ____________
31. ____________
32. ____________
33. ____________
34. ____________
35. ____________
36. ____________

37. ____________
38. ____________
39. ____________
40. ________________
41. ____________
42. ________________

43. 0 1 2 3 4 5 6 7
44. 0 1 2 3 4 5 6 7
45. 0 1 2 3 4 5 6 7

46. ____________________

47. 0 1 2 3 4 5 6

48. 0 1 2 3 4 5 6

49. 0 1 2 3 4 5 6

50. 0 1 2 3 4 5 6

51. ____________________

52. ____________________

53. ____________________

54. ____________________

55. ____________________

56. ____________________

57. __________

58. __________

59. __________

60. ____________________

61. ____________________

62. ____________________

63. ____________________

64. ____________________

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66. ____________________

67. ____________________

68. ____________________

69. ____________________

70. ____________________

71. ____________________

72. ____________________

73. ____________________

74. __________

75. __________

76. __________

77. 0 1 2 3 4 5 6 7 8 9

78. 0 1 2 3 4 5 6 7 8 9

79. 0 1 2 3 4 5 6 7 8 9

80. 0 1 2 3 4 5 6 7 8 9

81. ____________________

82. ____________________

83. ____________________

84. ____________________

Name ______________________________ Date ____________________

4-1. Identity Elements

1. ________
2. ____________________
3. ________

4. ________
5. ________

6. ________
7. ____________________
8. ________
9. ________
10. ____________________
11. ____________________

12. A B C

13. ___________
14. ___________
15. ___________
16. ___________

17. ___________
18. ____________________, ________
19. ___________
20. ____________________, ________
21. ___________
22. ____________________, ________

23. ___________

24. ________________
25. ________________
26. ________________

27. ________, ________
28. ________
29. ____________________
30. ____________________
31. ____________________
32. ___________
33. ________, ________

34. ________
35. ________
36. ________________
37. ________

38. _____, ________
39. ________
40. ________________
41. ________
42. ________

43. A B C D

Name ______________________________ Date ____________________

4-2. Closure

1. ______________

2. __________
3. __________
4. __________
5. __________________
6. __________________
7. __________
8. __________________

9. ______________
10. __________
11. ______________
12. ______, ______
13. ______, ______
14. __________
15. __________
16. __________, ________

17. A B C D

18. __________
19. __________
20. __________
21. __________
22. _______________________

23. __________
24. __________
25. __________
26. __________________________
27. __________
28. __________

29. A B C D

30. A B C

Name ______________________________ Date ____________________

4-3. Associative and Commutative Properties of Addition and Multiplication

1. ________
2. ______________
3. ________
4. ________
5. ________

6. ________
7. ________
8. ________
9. ________

10. ______________
11. ______________
12. ______________
13. ______________
14. ______________________
15. ____________, ____________
16. ______________

17. ______________
18. ________
19. __________________
20. __________
21. __________________
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24. ______________

25. __________________
26. __________________
27. __________________

28. ______________
29. __________________
30. ______________________
31. __________________
32. ______________

33. __________
34. __________________
35. ________
36. ______________

37. A B C Y

38. A B C D

39. ____________
40. ____________
41. ____________
42. ____________
43. ____________

44. ______________
45. ________, ________
46. ______________
47. ______________
48. ______________

49. ____________________

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59. _______________

60. _______________

61. _______________

62. ________, ________

63. ____________

64. ____________________

65. ________

66. ________

67. __________

68. A B

*69. _______________

*70. _______________

*71. _______________

*72. _______________

*73. _______________

*74. _______________

*75. _______________

*76. A B

S

Name ______________________________ Date ____________________

4-4. The Distributive Property

1. ______________
2. ______________
3. ______________
4. ______________
5. ______________

6. ______________
7. ______________
8. ______________
9. ______________

10. A B

11. A B

12. A B

13. ______________
14. ______________
15. ______________
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52. ____________________
53. ____________________
[illegible]. ____________________
55. ____________________
56. ____________________
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84. ______________, ____________
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102. ______________
103. ______________
104. ______________
105. ______________
106. ______________

Name______________________________ Date____________________

4-4. Continued

107. ____________________
108. ________
109. ________
110. ____________________
111. _________________________
112. ________
113. _________________________
114. _________________________

115. A B C

116. __________________
117. __________________
118. __________________
119. __________________
120. __________________

Name ______________________________ Date ____________________

5-1. English and Mathematical Language

1. ______________

2. ______________

3. ______________

4. ______________ ____ ______

5. ____________________

6. ______________

7. ____________________

8. A B

9. A B

10. ____________________

11. __________

12. __________

13. ____________________

14. ____________________

15. ____________________

16. ____________________

17. _______________

18. _______________

19. _______________

20. _______________

21. _______________

22. _______________

23. A B C

24. A B C

25. A B C

26. __________________

27. ______________

28. ______________

29. ______________

30. ___________________

31. ___________________

32. ______________

33. _________

34. ____________________________
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35. ____________________________
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36. ____________________________
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37. ____________________________
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38. ____________________________
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Name ______________________ Date ______________

5-2. English Phrases and Open Phrases

1. ____________
2. ____________
3. ____________
4. ____________

5. ____________
6. ____________
7. ____________
8. ____________
9. ____________
10. ____________
11. ____________

12. ____________
13. ____________

14. A B

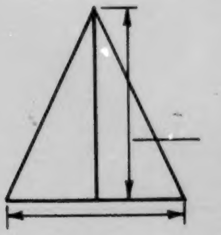
15. ____________
16. ____________
17. ____________

18. ____________
19. ____________

20. ____________
21. ____________
22. ____________

23. ____________
24. ____________

25. ____________
26.



27. ____________
28. ____________

29. ____________
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*53.

*54.

55. ____________________

56. ____________________

57. ____________________

58. (a) ________________

(b) ________________

(c) ________________

(d) ________________

59.

(a) ________________

(b) ________________

60. ____________________

*61. ____________________

Name______________________________ Date____________________

5-3. Interpreting Open Sentences

1. ____________
2. ___ ___ , ___ ___ ___ ___ ___
3. ____________
4. _______ _______ _______
5. ___ ___ ___ or ___ ___ ___
6. ____________

7. ________________________

____

8. ________________________

____

9. ________________________

____

10. A B C

11. ______________________
12. ______________________
13. ______________________
14. ______________________
15. ______________________
16. ______________________

17. A B

18. ____________
19. _________

Name________________________ Date______________

5-4. Writing Open Sentences

1. ____________

2. ____________

3. ____________

4. ____________

5. ____________

6. ________________

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9. ________________

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21. _________, _________

22. ____________, _________

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24. ________________

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31. ________________

32. _______

33. ____________________

34. ________________________

35. _______

36. _______

37. _______

38. ___________

39. ___________

40. _________

41. ________________________

42. A B

43. _________

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73. ________

74. ________

75. ____________

76. ____________

77. ____________

78. ________

79. ________________________

80. ________

81. ________ ________

82. A B C

83. __________

84.

85. ________, ________

Name____________________________________ Date______________________

5-5. Review

1. ____________________
2. ____________________
3. ____________________

4. ________________
5. ________, ________
6. ________________
7. ________________
8. ________________
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11. ____________________
12. ____________________
13. ____________________
14. ____________________
15. ____________________
16. ____________________
17. ____________________
18. ____________________
19. ____________________
20. ____________________
21. ____________________
22. ____________________

23. ________, ________
24. ____________________
25. ____________________

26. ____________________
27. ____________________

28. ____________________
29. ____________________
30. ____________________
31. ____________________
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34. ____________________

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36. ____________________

37. ____________________
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39. ____________________
40. ____________________

41. ____________________
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43. ____________________
44. ____________________
45. ____________________
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56. ______________________

57. ______________________

58. ______________________

59. ______________________

60. ______________________

61. ______________________

*62. ______________________

63. 0 1 2 3

64. 0 1 2 3

65. 0 1 2 3

66. 0 1 2 3

67. 0 1 2 3

68. 0 1 2 3

69. 0 1 2 3

70. 0 1 2 3

71. 0 1 2 3 4 5 6

72. 0 1 2 3 4 5 6

73. 0 1 2 3 4 5 6

74. 0 1 2 3 4 5 6

75. 0 1 2 3 4 5 6

76. 0 1 2 3 4 5 6

77. ______________________

78. ______________________

79. ______________________

Name________________________ Date________________

6-1. The Real Number Line

1. ________
2. ________
3. ________
4. ________
5. ________
6. ________

7. ________
8. ________
9. ________
10. ________
11. ________
12. ________
13. ________
14. ________

15. ________
16. ________
17. ________
18. ________
19. ________

20. ________
21. ________
22. ________
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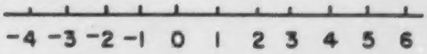
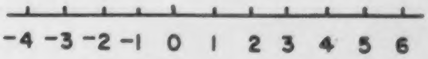
24. ________

25. ________
26. ________
27. ________
28. ________

29.


-4 -3 -2 -1 0 1 2 3 4 5 6

30.


-4 -3 -2 -1 0 1 2 3 4 5 6

31. ________
32. ________
33. ________
34. ________

35. ________
36. ________
37. ________
38. ________
39. ________
40. ________
41. ________
42. ________
43. ________

44. ____

45. ____

46. ____

47. ____

48. ____

49. ____

50. A B C

51. ____

52. ____

53. ____

54. ____

55. ____

56. ____

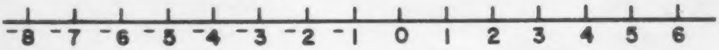
57. A B C D

58. ____

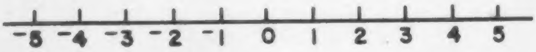
59. ____ ____

60. ____

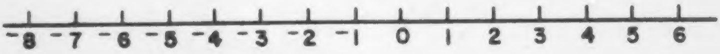
61.


⁻8 ⁻7 ⁻6 ⁻5 ⁻4 ⁻3 ⁻2 ⁻1 0 1 2 3 4 5 6

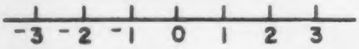
62.


⁻5 ⁻4 ⁻3 ⁻2 ⁻1 0 1 2 3 4 5

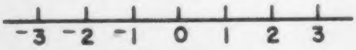
63.


⁻8 ⁻7 ⁻6 ⁻5 ⁻4 ⁻3 ⁻2 ⁻1 0 1 2 3 4 5 6

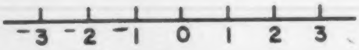
64.



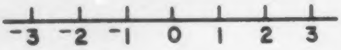
65.



66.



67.



68. ____

69. ____

70. ____

71. ____

72. ____

73. ____

74. ____

75. ____

76. ____

77. ____

78. ____ ____ ____ ____

79. ____ ____ ____ ____

80. ____ ____ ____ ____

Name ______________________________ Date ____________________

6-2. Order on the Real Number Line

1. ________________
2. __________
3. __________
4. __________
5. __________

6. A B

7. __________
8. __________
9. __________
10. __________
11. ________________
12. __________
13. ________________
14. __________
15. ________________
16. __________
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19. __________
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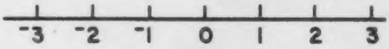
27. __________
28. __________
29. __________

30. __________
31. __________
32. __________
33. __________
34. __________
35. __________

36. A B

37.


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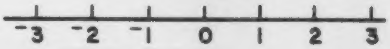

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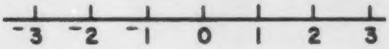
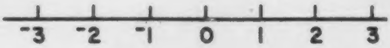


40.


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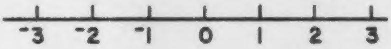
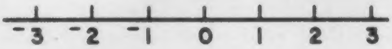
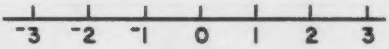
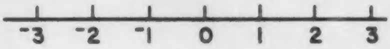
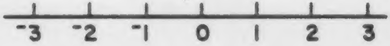


42.


43.


44.


45.


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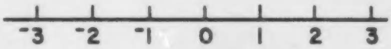

47. __________
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57. __________

58. __________
59. ________, ________, ________

60. A B C

61. __________

62. _____, _____________
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93. _____________
94. _____________
95. _____________

96. A B

97. _______________
98. _______________

99. ____________
100. ____________
101. ____________

*102. ____________
*103. ____________

Name ______________________ Date ______________________

6-3. Opposites

1. ______
2. ______
3. ______
4. ______
5. ______
6. ______

7. ______
8. ______
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50. ______

51. A B

52. ______
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54. ______
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72.

-5 -4 -3 -2 -1 0 1 2 3 4 5

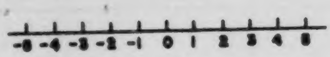
73.

-5 -4 -3 -2 -1 0 1 2 3 4 5

74.

-5 -4 -3 -2 -1 0 1 2 3 4 5

75.


-5 -4 -3 -2 -1 0 1 2 3 4 5

76. ____________

77. ____________

78. ____________

79. ____________

80. A B C D

81.

-5 -4 -3 -2 -1 0 1 2 3 4 5

82. ________

83. ________

84.

-5 -4 -3 -2 -1 0 1 2 3 4 5

85. ____________

86. ____________

87. ____________

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89. ____________

90. ____________

91. ____________

92. ____________

Name ______________________________ Date ____________________

6-4. Absolute Value

1. __________ __________
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15. __________
16. __________
17. __________
18. __________

19. A B C

20. __________ __________
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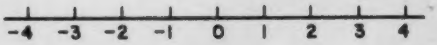
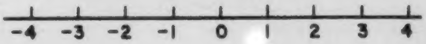


41. __________
42. __________

43.



44. __________
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62. A B C

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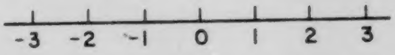
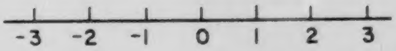
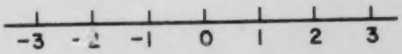


98.



99.

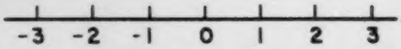


100. ____________

101. ____________

102. ________________

103.

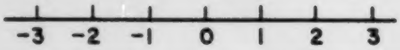


104. ____________

105. ____________

106. ____________

107.

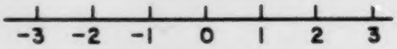


108. ____________

109. ____________

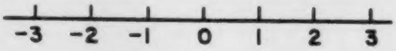
110. ____________

111.



112. ____________

113.



114. ____________

115. ____________

116. ____________

117. ____________

118. A B C D

*119. ____________________

*120. ____________________

121. A B C D E

*122. A B

Name ____________________ Date ____________________

7-1. Addition of Real Numbers

1. ____

2. ____

3. ____

4. ____

5. ____

6. ____

7. ____

8. ____

9. ____

10. ____

11. ____

12. Write in Panel 7-1.

13. ____

14. ____

15. ____

16. ____

17. ____

18. ____

19. Write in Panel 7-1.

20. ____

21. Write in Panel 7-1.

22. Write in Panel 7-1.

23. Write in Panel 7-1.

24. Write in Panel 7-1.

25. ____

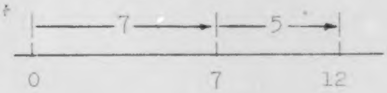
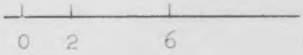
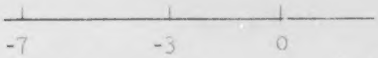
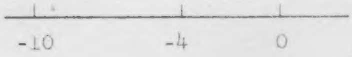
26. ____

27. ____

28. ____

29. ____

PANEL 7-1

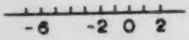
Column 1	Column 2	Column 3
Business	Net Income (by arithmetic)	Net Income (number line)
Mon.: Profit of $7 Tues.: Profit of $5	7 + 5 = 12	
Wed.: Profit of $6 Thurs.: Loss of $4 (Tire trouble)	⑫ ____	
Fri.: Loss of $7 (Another tire) Sat.: Profit of $4	⑲ ____	
Sun.: Day of rest Mon.: Loss of $3 (cold day)	㉑ ____	㉒
Tues.: Loss of $4 (colder) Wed.: Loss of $6 (gave up)	㉓ ____	㉔ 

30. ____________

31. ____________

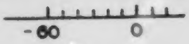
32. ____________

33. ____________

34.


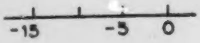
35. ________________

36. ____________

37.


38. ________________

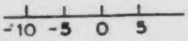
39. ________________

40.


41. ________________

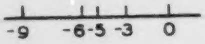
42. ___________

43. ___________

44.


45. ________________

46. ________________

47.


48. __________________

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64. A B

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72. __________

73. __________

74. __________

75. __________

76. A B C

Name ______________________ Date ______________

7-2. Definition of Addition

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25. Write in Panel 7-2.
26. ____________
27. ________
28. ____________
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30. ________
31. ________
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33. ________
34. ________

35. A B C

36. ________
37. ________
38. ________
39. ________

PANEL 7-2

Definition of Addition for Real Numbers

Part 1. If $a \geq 0$ and $b \geq 0$, then a and b are numbers of arithmetic and $a + b$ has its usual meaning.

Part 2. If $a < 0$ and $b < 0$, then ______________________. ㉕

Part 3. If $a \geq 0$ and $b < 0$, and

(a) if $|a| \geq |b|$, then ______________________. (83)

(b) if $|b| > |a|$, then ______________________. (84)

Part 4. If $b \geq 0$ and $a < 0$, and

(a) if $|b| \geq |a|$, then ______________________. (85)

(b) if $|a| > |b|$, then ______________________. (86)

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83. Write in Panel 7-2.
84. Write in Panel 7-2.

85. Write in Panel 7-2.
86. Write in Panel 7-2.

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117. __________

Name ______________________________ Date ______________________

7-3. Properties of Addition

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79. __________
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81. __________
82. __________

83. __________
84. __________

Name________________________________ Date______________________

7-4. Addition and Equality

1. ____________
2. ____________
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9. ____________
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11. A B

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43. ____________
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45. A B C D E

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71. ____________
72. ____________
73. ____________
74. ____________

Name________________________________ Date____________________

7-5. The Additive Inverse

1. __________

2. __________

3. __________

4. __________ __________

5. __________

6. __________

7. __________

8. __________

9. __________

10. A B C

11. __________

12. __________

13. __________ __________

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72. ______________

73. ______________

74. ______________

75. ________________________

76. ______________, ______________

77. ________________________

78. ______________, ______________

79. A B

80. A B

Name ______________________ Date ______________________

8-1. Multiplication of Real Numbers

1. ____________

2. ____________

3. ____________
4. ____________
5. ____________ ____________

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84. ______

85. ______

86. ______

87. A B C

88. ______

89. ______

90. ______

91. ______

92. ______

93. ______

94. ______

95. ______

96. A B C D

97. ______

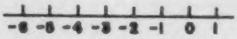
98. ______

99. ______

100. ______

101. ______

102.



103. ______

104. ______

105. ______

106. ______

107. ______

108. ______

109. ______

110. ______

111. ______

112. ______

113. ______

114. ______

*115. ______

*116. ______

*117. ______

*118. ______

*119. ______

Name ______________________________ Date ______________________

8-2. The Commutative Property and the Multiplication Properties of 1 and 0

1. ________
2. ________
3. ________
4. ________

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*30. ____________
*31. ____________

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39. ____________
40. ________
41. ________

PANEL 8-2

Theorem. If a is any real number, then $a \cdot 1 = a$.

Proof.

Case I: a is non-negative.

If a is non-negative, then $a \cdot 1 = a$, because the

42. ____________________ property of ____________

43. holds for all ____________________ real numbers.

44. Case II: a is ________________.

Since a is negative and 1 is non-negative,

45. $a \cdot 1 = -(|a||1|)$ — ____________ of ____________ of real numbers

46. $= -(|a| \cdot 1)$ — since $|1| =$ ________

47. $=$ ________ — Multiplication property of 1 for non-negative real numbers

But, since a is negative,

48. $|a| =$ ______ — Definition of absolute value

Hence, $-|a| = -(-a)$

49. $=$ ________ — The opposite of the opposite of a real number is the number itself.

50. Hence, $a \cdot 1 =$ ________ — Since $a \cdot 1 = -|a|$ [Item 47] and $-|a| = a$ [Item 50]

51. ____________

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58. ________________
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59. ________________
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61. ________________
62. ________________
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63. ____________

64. ____________
65. ________________
66. ________________

*67. A B C D

68. ____________
69. ____________
70. ____________
71. ____________
72. ____________
73. ____________

Name ______________________ Date ______________________

8-3. The Associative and Distributive Properties

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*43. ________
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Name ______________________________ Date ______________________

8-4. Use of the Multiplication Properties

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Name ______________________ Date ______________________

9-1. Multiplicative Inverse

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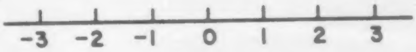
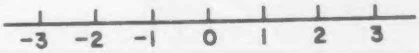


31. __________
32. __________
33.



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53. ________

54. ________

55. ________

56. ________

57. A B

58. ________

59. ________

60. A B

61. ________

62. ________

63. ________

64. ________

65. A B C D

66. ________

67. ________

68. ________

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Name ______________________________ Date ____________________

9-2. Reciprocals

1. ____________
2. ____________
3. ____________
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5. ____________
6. ____________
7. ____________
8. ____________

9. A B

10. A B

11. A B C

12. ____________
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Name ______________________________ Date ____________________

9-3. Solution of Equations

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75. ______
76. ______

77. A B C D

78. ______
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Name ______________________ Date ______________________

10-1. The Fundamental Properties of Order

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2. __________

3. __________
4. __________

5. A B C

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39. A B C

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66. ____________

67. ____________

68. ____________

69. ____________

70. (Show your work.)

71. ____________

72. ____________

73. ____________

74. ____________

75. ________

76. ________

77. ________

78. ________

79. ________ ________

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83. ________ ________

Name ______________________________ Date ______________________

10-2. Further Properties of Order

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*22. Write your proof on a separate sheet of paper.

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24. ____________
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47. A B C D

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*60. __________________

*61. __________________

*62. __________________

*63. __________________

*64. Write your proof on a
separate sheet of paper.

*65. __________________

*66. __________________

*67. Write your proof on a
separate sheet of paper.

Name ______________________ Date ______________________

10-3. Solving Inequalities

1. ______
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4. ______
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9. A B C D

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27. A B

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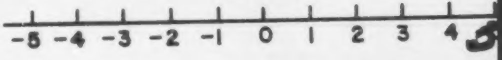
29.



30. ______
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36. A B C D

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Name________________________________ Date______________________

11-1. Definition of Subtraction

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Name______________________________ Date____________________

11-2. Properties of Subtraction

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53. A B C D E

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74. A B C D

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Name______________________________ Date____________________

11-3. Subtraction and Distance

1. __________

2. __________

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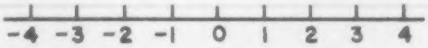
4. __________

5.



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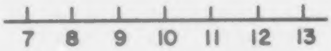

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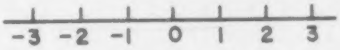
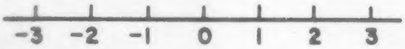


45. A B C D

46.



47. ______

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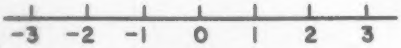

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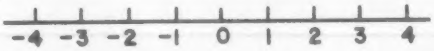
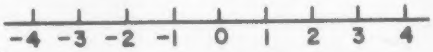
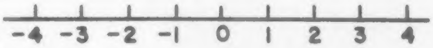


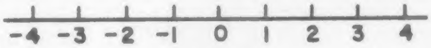
73.



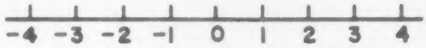
74.



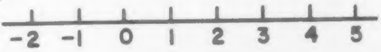
75.



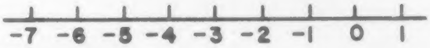
76.



77.



78.



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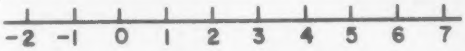

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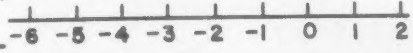

*82. ______, ______

*83. ______, ______

*84. ______, ______

*85. ______, ______

*86. ______

*87. ______

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*89. ________, ________

*90. ________, ________

*91. ________, ________

*92. ________, ________

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Name_______________________________ Date_______________________

11-4. Division

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12-1. Factors

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54. A B C D

Name ______________________ Date ______________________

12-2. Tests for Divisibility

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12-3. Prime Numbers and Prime Factorization

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Name ______________________ Date ______________

12-4. Some Facts About Factors

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*74. A B C

*75. A B C

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Name____________________________ Date____________________

13-1. Multiplication of Fractions

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Name______________________________ Date____________________

13-2. Division of Fractions

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Name ______________________________ Date ____________________

13-3. Addition and Subtraction of Fractions

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Name ______________________________ Date ______________________

14-1. Introduction to Exponents

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Name ________________________________ Date ______________________

14-2. Positive Integers as Exponents

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Name ________________________________ Date ____________________

14-3. Non-Positive Integers as Exponents

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Name ______________________________ Date ______________________

14-4. Using Exponents

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86. A B C D E

Name ______________________________ Date ______________________

15-1. Roots

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Name ______________________________ Date ______________________

15-2. Irrational Numbers

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Name ____________________ Date ____________________

15-3. Simplification of Radicals

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Name ____________________ Date ____________________

15-4. Simplification of Radicals Involving Fractions

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95. ________
96. ________
97. ________
98. ________

Name ____________________ Date ____________________

15-5. Approximate Square Roots of Numbers between 1 and 100

1. ________
2. ________
3. ________

4. ________
5. ________
6. ________
7. ________

8. ____________
9. ________
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73. ________
74. ________
75. ________
76. ________
77. ________

78. ________
79. ________
80. ________

Name ______________________________ Date ______________________

15-6. Approximate Square Roots of Positive Numbers

1. ________
2. ________
3. ________
4. ________
5. ________
6. ________
7. ________

8. ________
9. ____________
10. ____________
11 ____________
12. ____________

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39. ____________
40. ____________
41. ____________

42. ____________
43. ____________
44. ____________
45. ____________
46. ____________
47. ____________
48. ____________

49. A B C

50. ________
51. ________
52. ________
53. ________

54. ________
55. ________
56. ________
57. ________
58. ________
59. ________
60. ________

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89. ____________

90. ________
91. ________
92. ________
93. ________

94. ________
95. ________
96. ________

Name ______________________________ Date ____________________

16-1. Polynomials

1. ____________
2. ____________
3. ____________
4. ____________
5. ____________

6. A B C D

7. A B C D

8. ________
9. ________
10. ________
11. ________
12. ________
13. ________
14. ________
15. ________
16. ________

17. ________
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51. ____________

52. ________
53. ________
54. ________
55. ________
56. ________
57. ________
58. ________
59. _____, _____, _____, _____

60. A B C D

61. ____________
62. ____________
63. ____________
64. ____________
65. ____________
66. ____________
67. ____________

68. ____________

69. ____________

70. ____________

71. ____________

72. ____________

73. ____________

74. ____________

75. ____________

76. ____________

77. ____________

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79. ____________

80. ____________

81. ________________

82. ________________

83. ________________

84. ________________

85. ________________

Name ______________________________ Date ____________________

16-2. Factoring by the Distributive Property

1. ____________
2. ____________
3. ____________
4. ____________
5. ____________
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7. ____________
8. ____________
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10. ____________
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12. ____________
13. ____________
14. ____________
15. ____________
16. ____________
17. ____________
18. ____________
19. ____________
20. ____________
21. ____________
22. ____________

23. A B C

24. ____________
25. ____________
26. ____________

27. A B C

28. ____________
29. ____________
30. ____________
31.
32. ____________
33. ____________
34. ____________
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54. ____________
55. ____________
56. ____________
57. ____________
58. ____________
59. ____________
60. ____________

61. A B C D

62. ____________

63. ____________
64. ____________
65. ____________

66. ____________
67. ____________
68. ____________
69. ____________
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*76. ____________
*77. ____________
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*81. ____________
*82. ____________

*83. ____________
*84. ____________
*85. ____________
*86. ____________

Name________________________________ Date____________________

16-3. Difference of Squares

1. ______________

2. ______________

3. ______________

4. ______________

5. ______________

6. ______________

7. ______________

8. ______________

9. ______________,

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10. ______________

11. ______________

12. ______________

13. ______________

14. __________

15. __________

16. __________

17. __________

18. __________

19. __________

20. ______________

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31. ________________

32. ________________

33. ________________

34. ________________

35. ________________

36. A B

37. ________________

38. ________________

39. ________________

40. ________________

41. ________________

42. ________________

43. ________________

44. ________________

45. ____________

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58. ______________

*59. ______________

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*74. ________________

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*96. _____________

*97. _____________

*98. _____________

*99. _____________

*100. _____________

Name ______________________ Date ______________________

16-4. Perfect Squares

1. ______

2. ______
3. ______
4. ______

5. ______
6. ______

7. A B C D

8. ______
9. ______
10. ______
11. ______
12. ______

13. ______
14. ______
15. ______
16. ______
17. ______
18. ______
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*22. ______

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56. ______
57. ______
58. ______

59. ______
60. ______, ______

61. ______
62. ______
63. ______

64. ______, ______
65. ______, ______
66. ______, ______

67. ____________

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69. ____________

70. ____________

71. ____________

72. ______, ______

73. ______, ______

74. ______, ______

75. ______, ______

76. ______, ______

77. ____________

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80. ____________

81. ____________

82. ____________

83. ____________

Name ______________________________ Date ____________________

16-5. Factoring by Completing the Square

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*41. ____________
*42. ____________

Name______________________________ Date____________________

16-6. Summary and Review

1. ______________
2. ______________
3. ______________
4. ______________
5. ______________
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7. ______________
8. ______________
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10. ______________
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15. ______________

16. ______________
17. ______________
18. ______________
19. ______________
20. ______________

Name ______________________________ Date ____________________

17-1. Factoring by Inspection

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8. ____________
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10. ____________
11. ____________

12. ____________
13. ____________
14. ____________

15. A B C D

16. ____________
17. ____________
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*105. ____________
*106. ____________
*107. ____________

*108. ____________
*109. ____________

Name ______________________________ Date ____________________

17-2. Factoring by Inspection, Continued

1. ____________
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21. ____________
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23. ____________
24. ____________

25. A B C

26. ____________
27. ____________
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*55. ____________

*56. A B

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97. ____________

Name______________________________ Date____________________

17-3. Factoring over the Real Numbers

1. ______________

2. ______________

3. ______________

4. ______________

5. ______________

6. A B C D

7. ______________

8. ______________

9. ______________

10. ______________

11. ______________

12. ______________

13. ______________

14. ______________

15. ______________

16. ______________

17. ______________

18. ______________

19. ______________

20. ______________

21. A B C D

22. A B C D

23. ______________

24. ______________

25. ______________

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75. ______________
76. ______________

Name ______________________________ Date ____________________

17-4. Quadratic Equations

1. __________
2. __________
3. __________
4. __________
5. __________
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9. __________
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67. __________
68. __________
69. __________
70. __________

71. ______________________

72. ______________________

73. ______________________

74. ______________________

Name________________________________ Date____________________

17-5. Summary and Review

1. ______________

2. ______________

3. ______________

4. ______________

5. ______________

6. A B C D

7. ______________

8. ______________

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71. ______________

72. ______________

73.

*74.

Name ______________________________ Date ______________________

18-1. Division of Polynomials

1. ____________
2. ____________

3. ________
4. ________
5. ________
6. ________
7. ________
8. ________
9. ________
10. ______,______
11. ________

12. A B

13. ____________
14. ________
15. ________
16. ________
17. ________

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66. ____ ______
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69. ____________
70. ____________
71. ____________

Name ______________________________ Date ______________________

18-2. Division of Polynomials, Concluded

1. __________
2. __________
3. ______________
4. __________
5. ______, ______

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9. __________
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*48. ________

*49. ________
*50. ________

51. ________
52. ________
*53. ________

Name ______________________________ Date ______________________

18-3. Products and Quotients Involving Polynomials

1. ________
2. ________
3. ________
4. ________

5. ________
6. ________
7. ________
8. ____________
9. ________
10. ____________

11. A B C D E

12. ________
13. ________
14. ________
15. ________
16. ________

17. ________
18. ________
19. ____________

20. ____________
21. ____________
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35. ______,______,______

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45. ________
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49. ________

Name ______________________________ Date ______________________

18-4. Rational Expressions

1. ________
2. ________
3. ____________
4. ____________
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27. ________
28. ________
29. ________

30. ________
31. ________
32. ________

33. ____________
34. ____________
35. ________

36. A B C D

37. ________
38. ________
39. ________
40. ________
41. ________
42. ________

Name ______________________________ Date ______________________

19-1. Equivalent Equations

1. A B C D

2. __________
3. __________
4. __________
5. __________
6. __________

7. A B C

8. __________
9. __________
10. __________
11. __________

12. __________
13. __________
14. __________
15. __________
16. __________

17. _______________
18. _______________
19. _______________
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25. _______________
26. _______________
27. _______________
28. _______________

29. __________
30. __________
31. __________

32. __________
33. __________
34. __________
35. __________
36. __________

37. A B

38. __________
39. __________
40. _______________

41. __________
42. __________
43. __________

44. __________
45. __________

46. __________

47. __________

48. _______________

49. _______, _______

50. __________

51. __________

52. __________

53. _______, _______

54. __________

55. _______, _______

56. __________

57. A B C D

58. __________

59. _______, _______

60. __________

61. __________

62. __________

63. __________

64. _______, _______, _______

65. _______, _______, _______

66. __________

67. __________

68. __________

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72. __________

73. __________

74. _______________

75. _______________

76. _______________

77. _______________

78. _______________

79. _______________

80. _______________

81. _______________

82. _______________

83. _______________

84. __________

85. __________

86. __________

87. __________

88. A B C D

89. A B C

90. __________

91. _______________

92. _______________

93. __________

94. _______________

95. __________

*96. _______________

Name ______________________________ Date ______________________

19-2. Fractional Equations

1. ________
2. ________
3. ________

4. ________
5. ________
6. ________
7. ________

8. A B C D

9. A B

10. ________
11. ________
12. ________

13. ________
14. ______________
15. ________
16. ________
17. ______________

18. ________
19. ________
20. ________

21. ________

22. ________
23. ________

24. ________
25. ______________

26. A B C

27. A B C D

28. ________

29. ________
30. ________

31. ________
32. ________
33. ________
34. ________

35. ________
36. ________

37. ________
38. ________
39. ________
40. ________

*41. ______________
*42. ______________
*43. ______________
*44. ______________

*45. ________
*46. ________
*47. ________

48. ________

49. ________
50. ______________
51. ______________
52. ______________
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54. ________
55. ______________
56. ________
57. ________

58. ________

59. ________
60. ________
61. ________
62. ________
63. ________
64. ______, ______

65. ________

66. __________
67. __________
68. __________
69. __________
70. __________
71. __________

72. __________

73. __________
74. __________
75. __________
76. __________
77. __________
78. __________

79. __________

80. __________
81. __________

82. __________

Name ______________________ Date ______________________

19-3. Squaring Both Sides of an Equation

1. ________
2. ________
3. ________
4. ____________

5. ________
6. ________
7. ________
8. ________
9. ________
10. ________
11. ________

12. ________
13. ________
14. ________
15. ________
16. ________

17. ________
18. ________

19. A B

20. ________
21. ______, ______
22. ________

23. ________
24. ________
25. ________

26. ________
27. ________
28. ________

29. ________
30. ________
31. ________
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37. ________
38. ________

39. ________
40. ________
41. ____________
42. ________
43. ________
44. ________

45. ________

46. ____________
47. ____________
48. ____________
49. ____________

50. ________

51. A B

52. ____________
53. ________
54. ________
55. ________

56. ____________
57. ____________
58. ____________
59. ____________

60. ________

61. ________

62. ________

Name ______________________________ Date ____________________

19-4. Inequalities

1. __________
2. __________
3. __________
4. __________

5. __________
6. __________
7. __________
8. __________
9. __________
10. __________

11. ________________
12. ________________

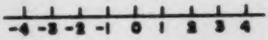
13. __________
14. __________
15. __________
16. __________
17. __________
18. __________

19. ____________________
20. ____________________
21. ____________________
22. ____________________

23. ________________
24. ________________

25. ________________
26. ________________

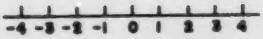
27. __________
28. __________
29. __________
30. _______, _______
31.



32. A B

33. __________
34. __________
35. ________________

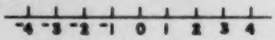
36. __________
37. __________
38. __________
39. __________
40. ________________
41.



42. __________
43. __________
44. __________
45. ________________

46. ____________________

47.



48. __________

49. __________

50. _______,_______

51. __________

52. __________

53. __________

54. A B C D

55. A B C

56. __________

57. __________

58. __________

59. __________

60. _______________

*61. __________

*62. __________

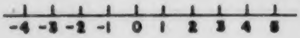
*63. __________

*64. __________

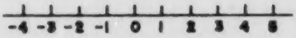
*65.

*66.

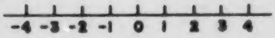
*67.


-4 -3 -2 -1 0 1 2 3 4 5

*68.


-4 -3 -2 -1 0 1 2 3 4 5

*69.



*70.

*71. ______________

*72. ___________________

*73. __________

*74. __________

*75. __________

*76. __________

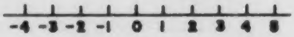
*77. __________

*78. __________

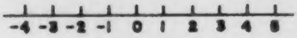
*79. __________

*80. __________

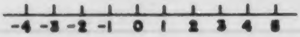
*81.


-4 -3 -2 -1 0 1 2 3 4 5

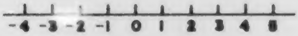
*82.


-4 -3 -2 -1 0 1 2 3 4 5

*83.


-4 -3 -2 -1 0 1 2 3 4 5

*84.


-4 -3 -2 -1 0 1 2 3 4 5

*85. ______________________

*86. ______________________

*87. ______________________

*88. ______________________

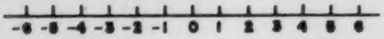
*89.

-6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6

*90.

-6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6

*91.


-6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6

*92.

-6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6

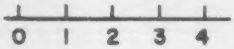
Name________________________ Date________________

20-1. The Real Number Plane

1. ____________

2. ____________

3.



4. A B C

5. ________________

6. ____________

7. ____________

8. ____________

9. ____________

10. ____________

11. ____________

12. ____________

13. ____________

14. ________________

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93. ____________
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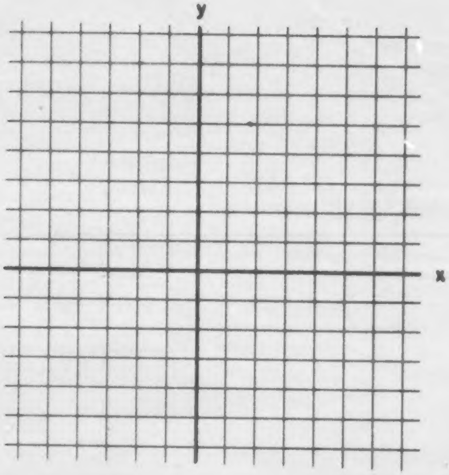
95. ____________

96.



97. ____________

98. ____________

99. ____________

100. ____________

101. ____________

102. ____________

103. ____________

104. ____________

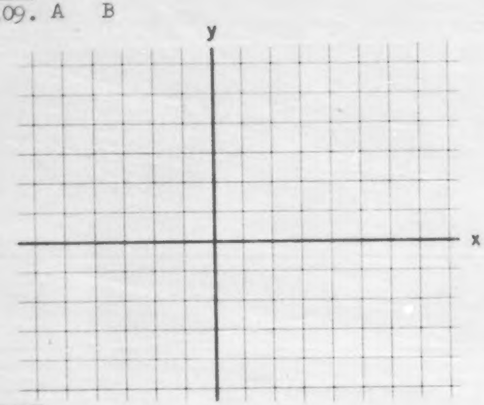
105.

106.

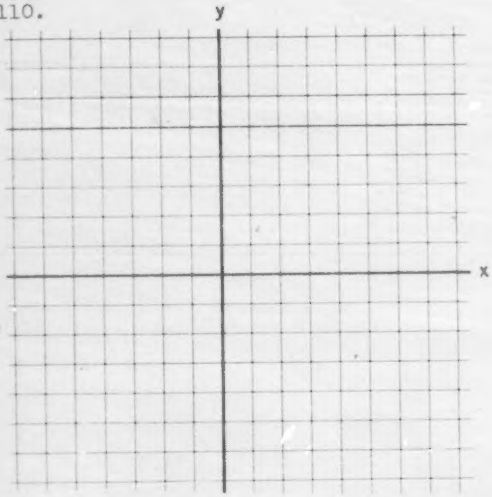
107. ____________

108. ____________

109. A B



*110.



(a) ____________; ____________; ____________; ____________

____________; ____________; ____________; ____________

(b) ____________; ____________; ____________; ____________

____________; ____________; ____________; ____________

(c) ____________

(d) ____________

(e) ____________

(f) ________________________

____

*111. A B C D

Name________________________ Date________________

20-2. The y-Form of the Equation of a Line

1. ____________
2. ____________
3. ____________
4. ____________
5. ____________
6. ____________
7. ____________

8. ____________
9. ____________

10. ____________
11. ____________
12. ____________
13. ____________

14. ________
15. ________
16. ________
17. ________

18. ____________
19. ____________

20. A B

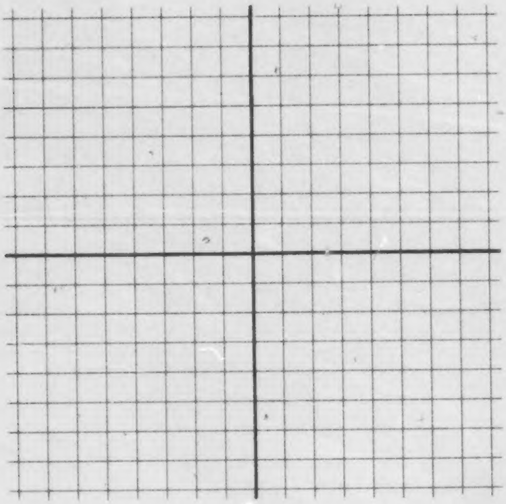
21. ____________
22. ____________

23. ____________
24. ____________

25. ____________
26. ____________
27. ____________
28. ____________
29. ____________
30. ____________
31. ____________
32. ____________
33. ____________

34. ____________
35. ____________
36. ____________
37. ____________

38 and 39.



40. ____________

41. ____________

42. ____________

43. ____________

44. ____________

45. ____________

46. ____________

47. ____________

48. ____________

49. ____________

50. A B C

51. ____________

52. ____________

53. ____________

54. ____________

55. ____________

56. ____________

57. ____________

58. ____________

59. ____________

60. A B C D

61. ______________

62. ______________

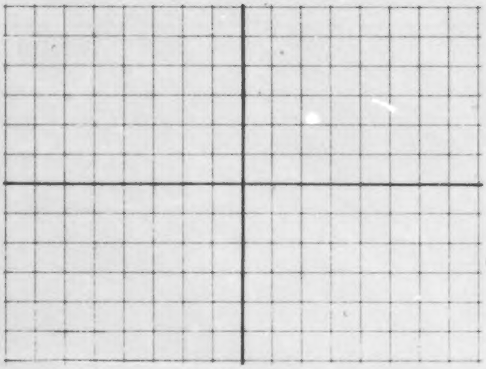
63. ______________

64. ______________

65. ______________

66.

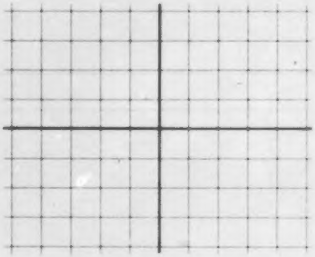
y = ____________



67. ______________

68. ______________

69.



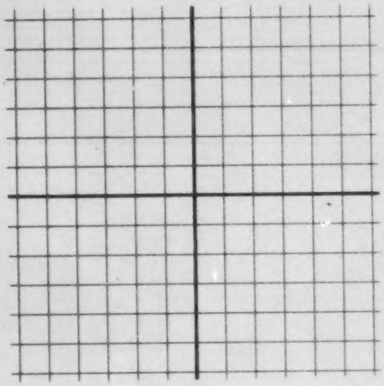
70. ______________

71. ______________

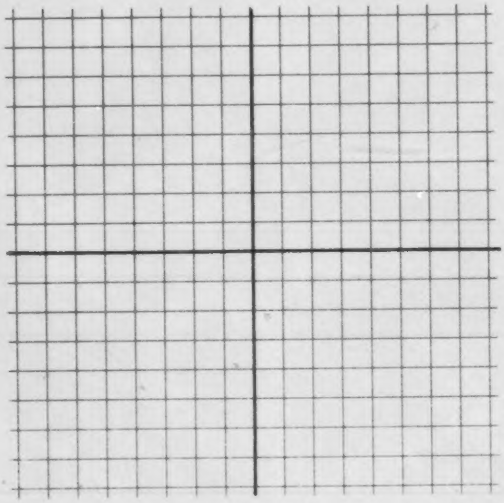
72. ______________

73. ______________

74.



75.



76. ______________

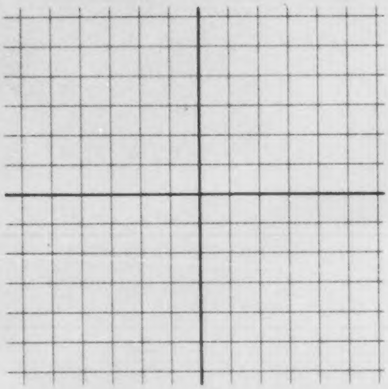
77. ______________

78. ______________

79. ______________

80. ______________

81.



82. ____________

83. ____________

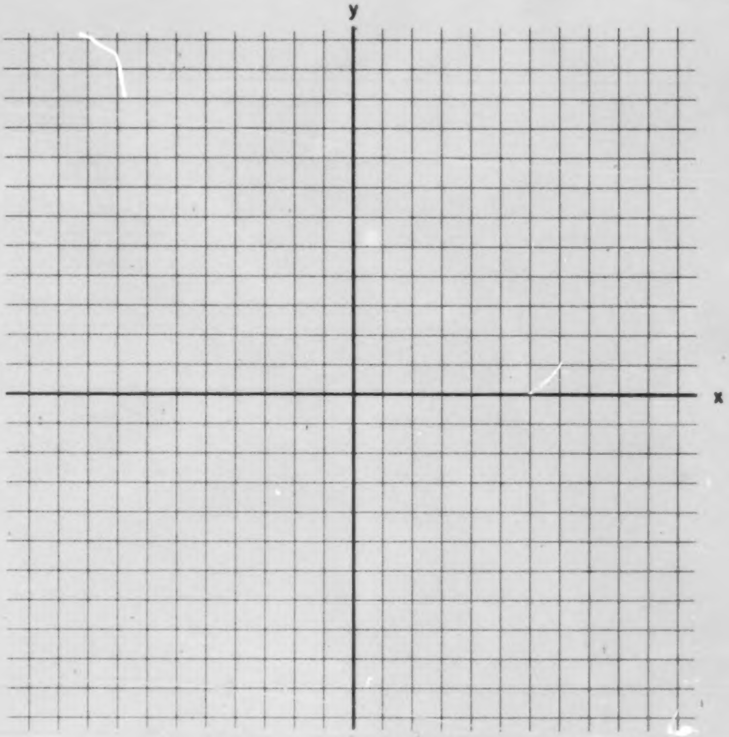
Name________________________________ Date____________________

20-3. Definition of Slope and y-Intercept

1.

x	-6		$-2\frac{1}{2}$		3		6
y		-3		0		5	

2. (Use also for Items 9, 16, 20, and 23.)



3. ____________

4. ____________

5. ____________

6. ____________

7. ____________

8.

x	-6		$-4\frac{1}{3}$		2.5		6
y		5.5		0		-4	

9. Use coordinate axes in Item 2.

10. ____________

11. ____________

12. ____________

13. ____________

14. ____________

15. ____________

16. Use coordinate axes in Item 2.

17. ____________

18. ____________

19. ____________

20. Use coordinate axes in Item 2.

21. ____________

22. ____________

23. Use coordinate axes in Item 2.

24. ____________

25. ____________

26. ____________

27. ____________

28. ____________

29. ____________

30. ____________

31. ____________

32. ____________

33. ____________

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40. ____________

41. ____________

42. ____________

43. ____________

44. ____________

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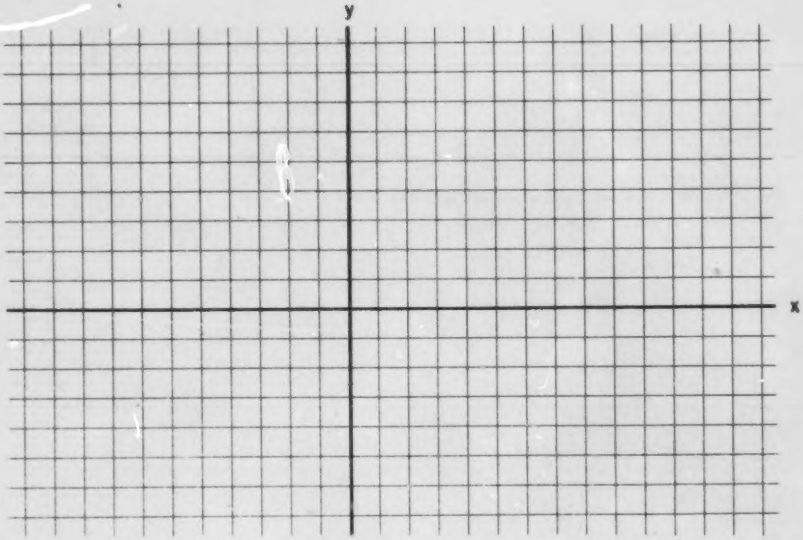
46. ____________

47. ______________

48. ______________

49. ______________

50. (Use also for Item 53.)



51. ______________

52. ______________

53. Use coordinate axes in Item 50.

54. ______________

55. ______________

56. ______________

57. ______________

58. ______________

59. ______________

60. ______________

61. ______________

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63. ______________

64. ______________

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66. ________________________

67. ______________

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70. ______________

71. ______________

72. ______________

73. ______________

74. ______________

75. ______________

76. ______________

77. A B C

78. ______________, ______________

79. ______________, ______________

80. ______________, ______________

81. ______________, ______________

82. ______________, ______________

83. ______________, ______________

84. ______________, ______________

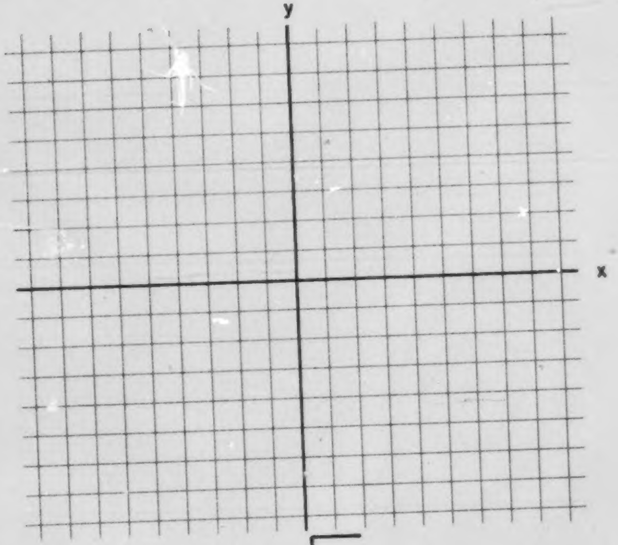
85. ______________, ______________

86. ______________, ______________

Name ______________________________ Date ____________________

20-4. Applications of the Slope and Intercept

1.



2. ____________________

3. ____________________

4. ____________________

5. ____________________

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*33. ____________

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40. ____________

41. ____________

42. ____________

43. ____________

44. ____________

45. A B C

46. ____________

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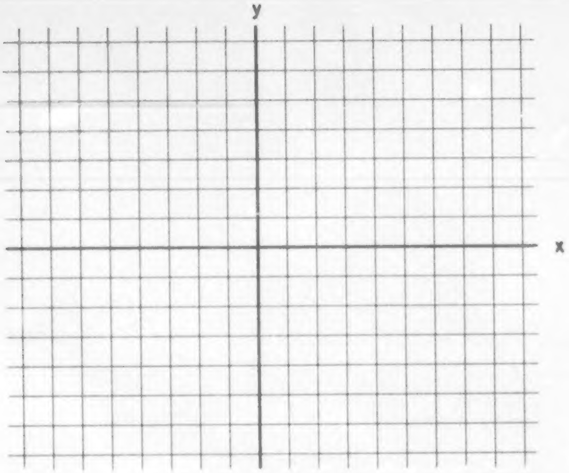
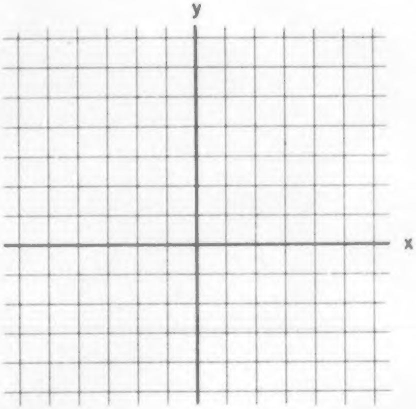
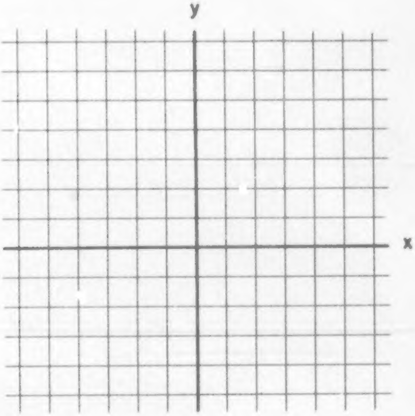


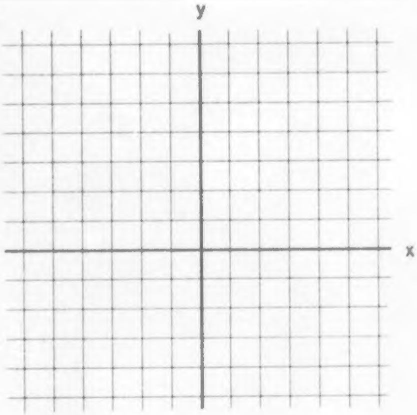
78.



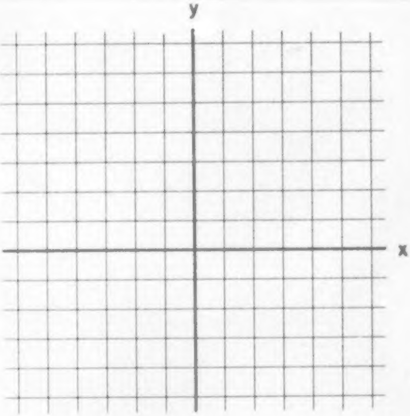
79.



80.



81.



82. ____________
83. ____________
84. ____________
85. ____________

86. ____________
87. ____________
88. ____________
89. ____________
90. ____________
91. ____________
92. ____________
93. ____________
94. ____________

95. ____________
96. ____________
97. ____________
98. ____________

99. ____________
100. ____________
101. ____________
102. ____________
103. ____________

104, 105, 106, 107.

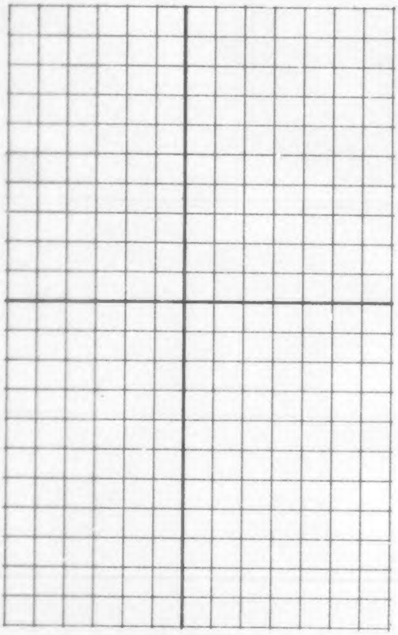
Name ____________________ Date ____________________

21-1. Graphs of Inequalities

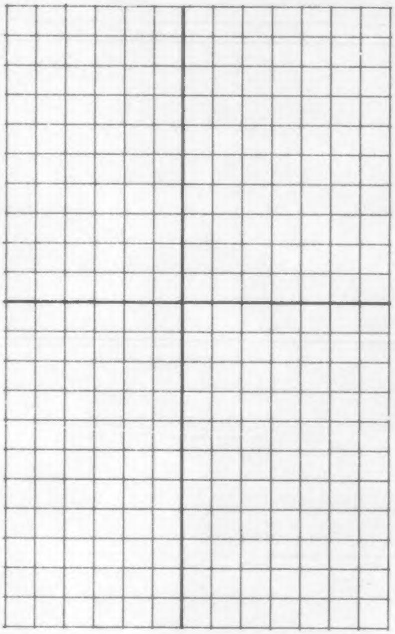
1. ________

2. ________

3.



4.



5. ________

6. ________

7. ________

8. ________

9. ____________

10. ________

11. ________

12. ________

13. ________

14. ____________

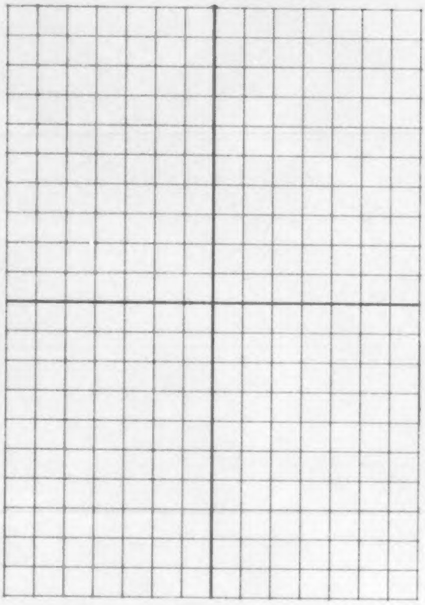
15. ________

16. ________

17. ________

18. ________

19.



20. ________

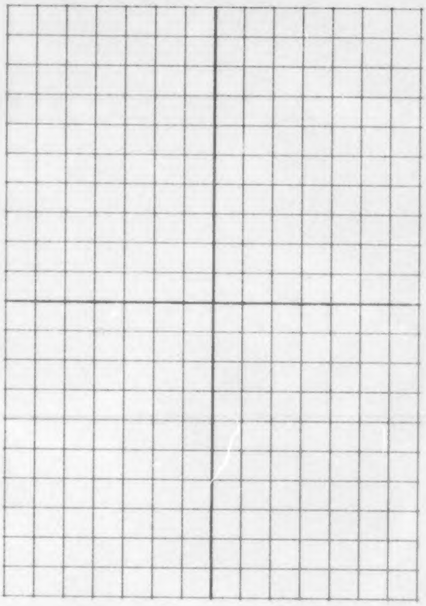
21. ________

22. ________

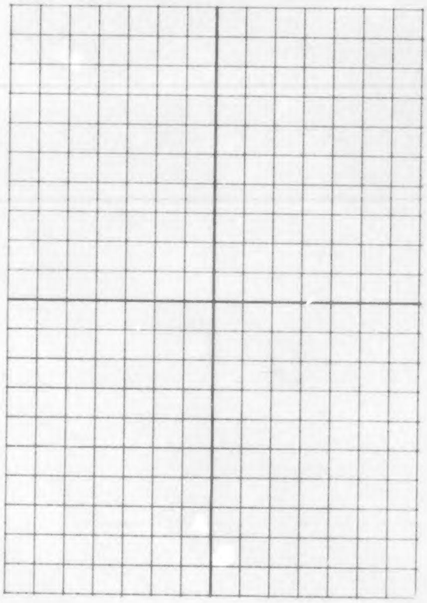
23. ________

24. ________

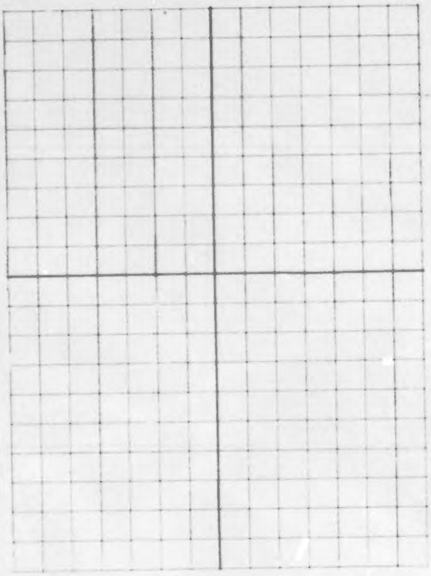
25.



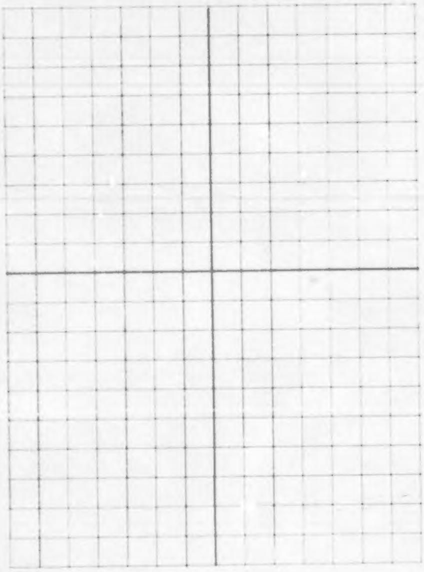
26.



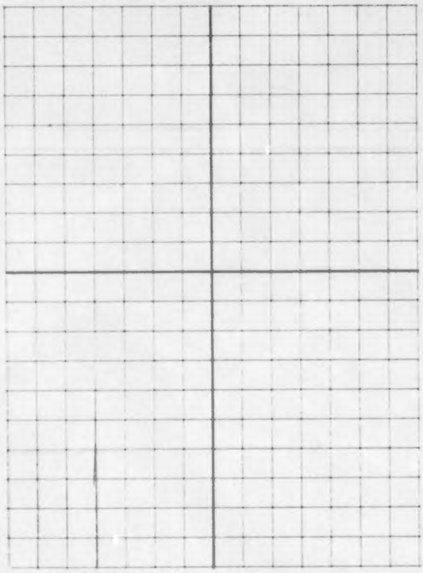
27.



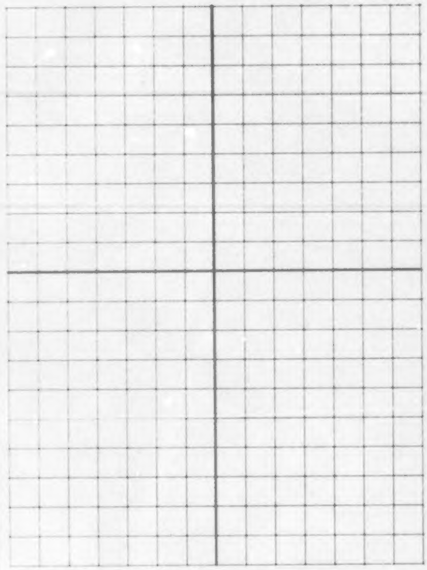
28.



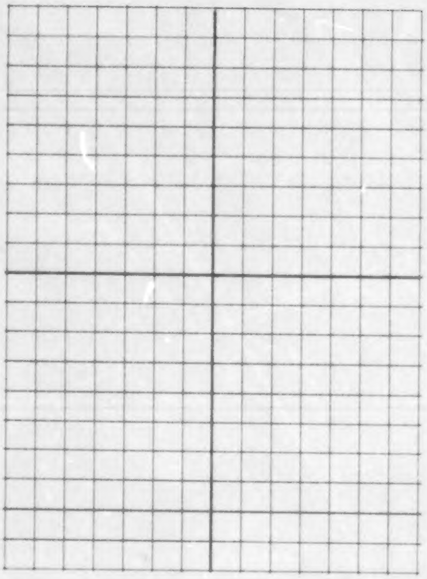
29.



30.



31.



33. ______

34. ______

35. ______

36. ______

37. ______

38. A B C

39. A B C

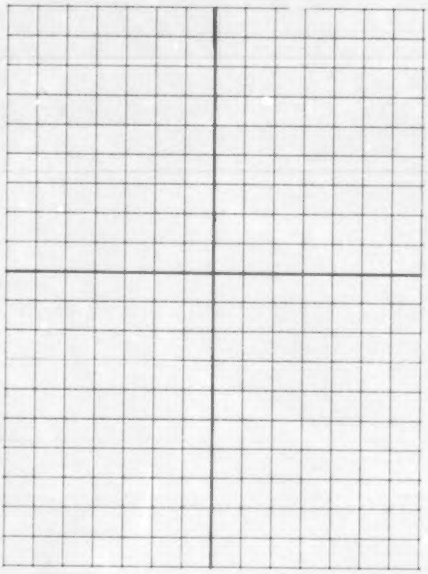
40. ______

41. ______

42. ______

43. ______

32.



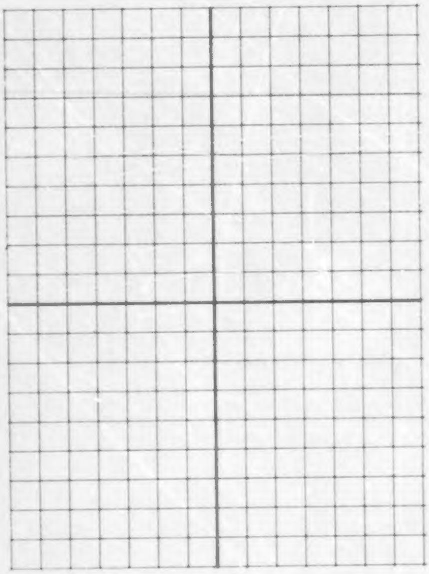
Name ______________________________ Date ____________________

21-2. Graphs of Open Sentences Involving Absolute Values

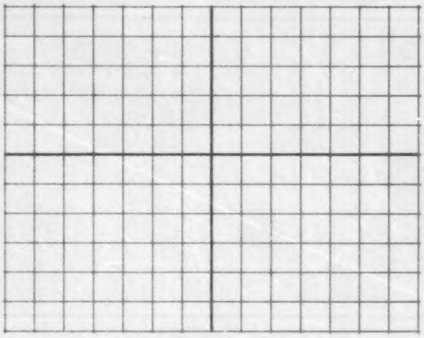
1. ________
2. ____________
3. ________
4. ________
5. ________
6. ________
7. ______, ______

8. A B C

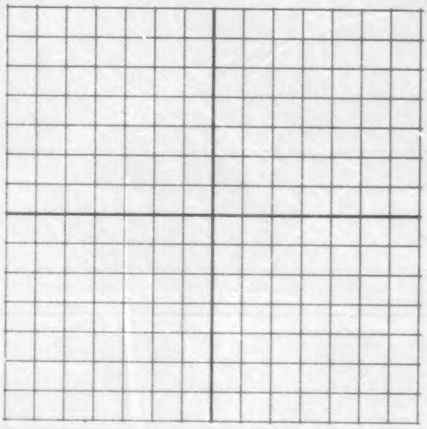
9. ____________
10. ________
11. ________
12. ________
13. ________
14.



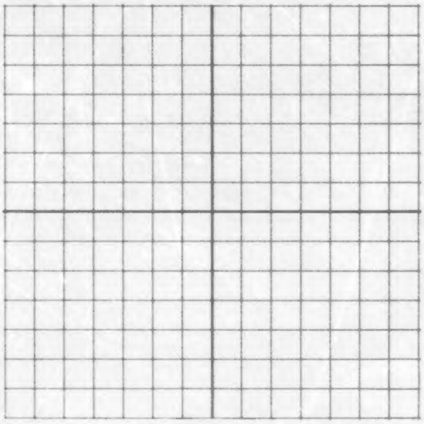
15.



16.



17.



18. ________

19. ________

20. ________

21. ________

22. ________

23. A B C

24. ____________

25. ________

26. ________

27. ____________

28. _______

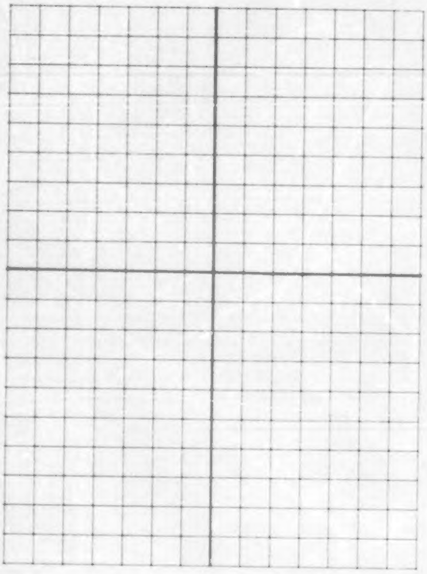
29. _______

30. _______

31. _______

32. ____________

33.



34. ________

35. ________

36. ________

37. ________

38. ________

39. ____________

40. ____________

41. ________

42. ________

43. ________

44. ________

45. ________

46. ________

47. ________

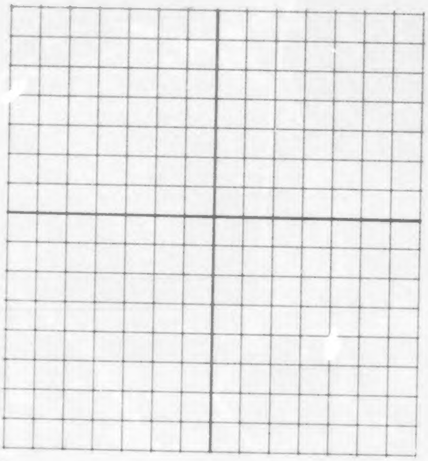
48. ________

49. ________

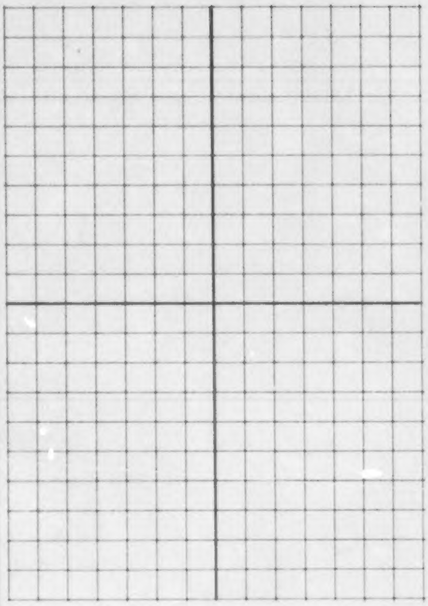
50. ________

51. ________

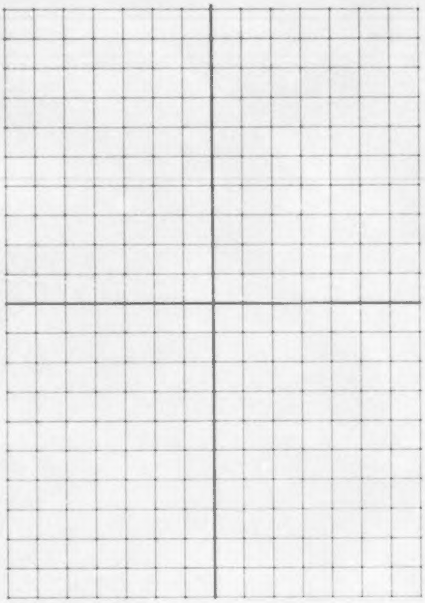
52.



53.



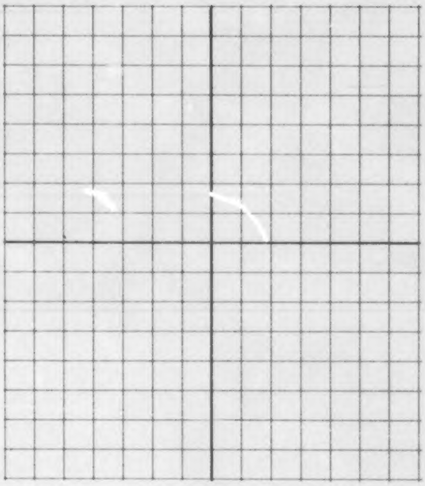
54.



55. ________

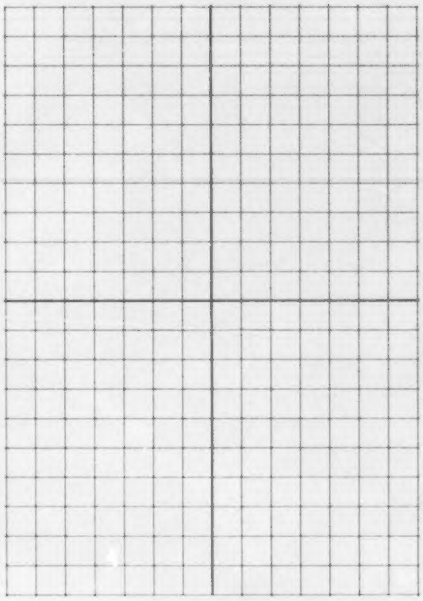
56. ______,______

57.



58. ________

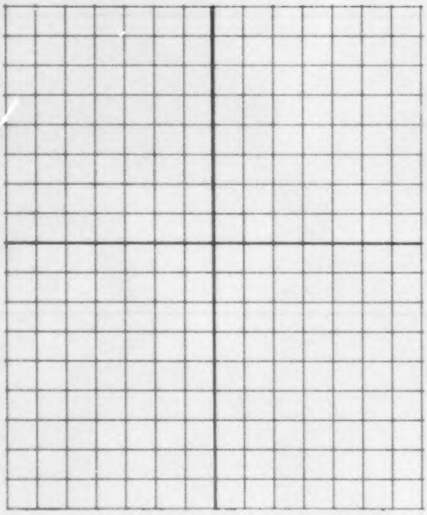
59.



60. ________

61. ______,______

62.



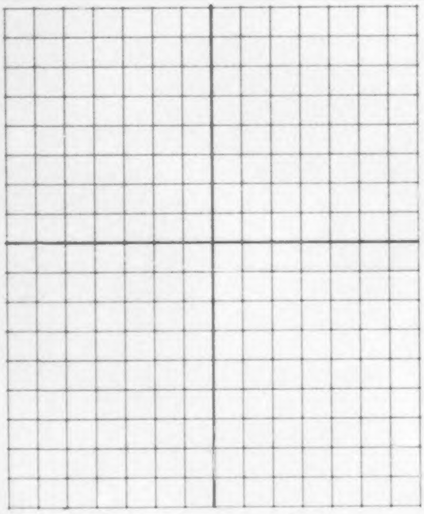
63. ____________

64. ________

65.

x	-6	-3	-1	-.5	0	1	1.5	4	7
y			1	.5	0	1			

66.



67. ________

68. ________

69. ________

70. ________

71. ________

72. ________

73. ________

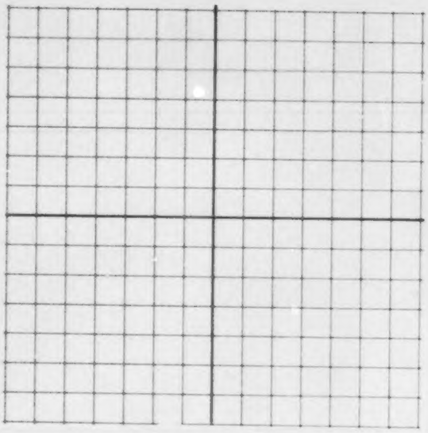
74. ________

75. ________

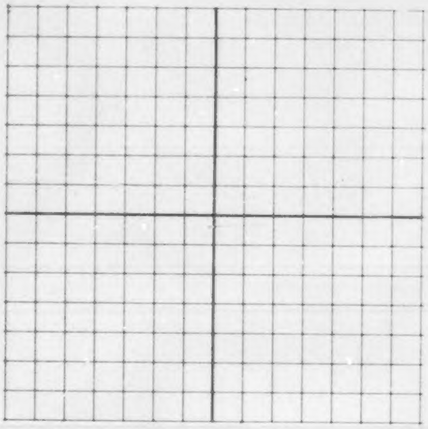
76. ________

77. ________

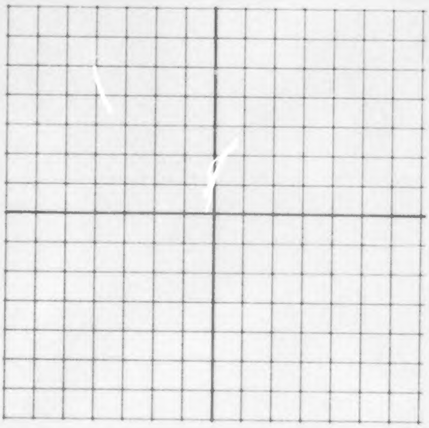
78.



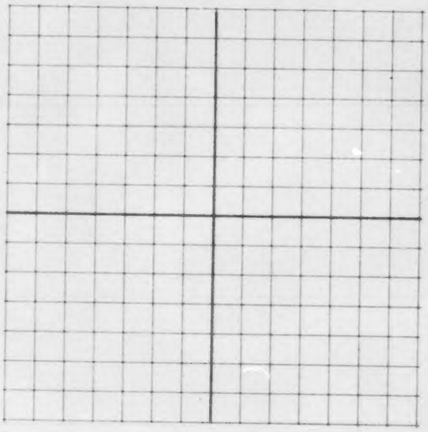
79.



80.



81.



82. A B

83. ____________

84. ____________

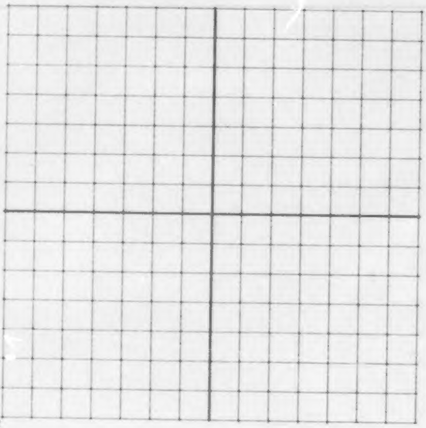
85. ____________

86. ____________

87. ____________

88. ____________

89.

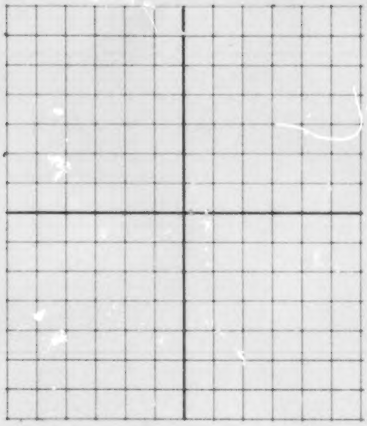


90. ____________

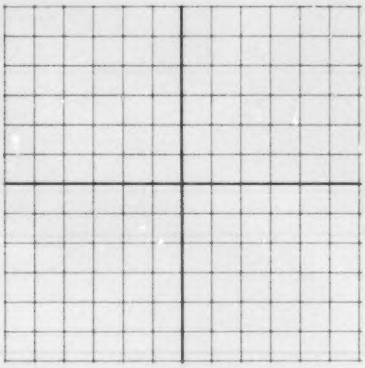
91. ____________

92. A B

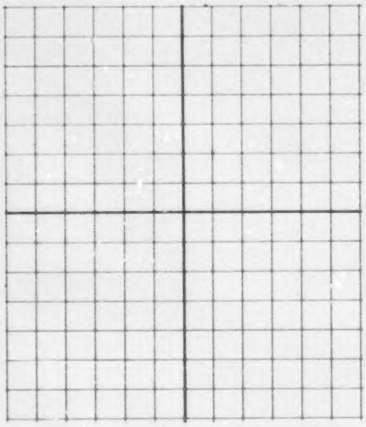
(1)



(2)

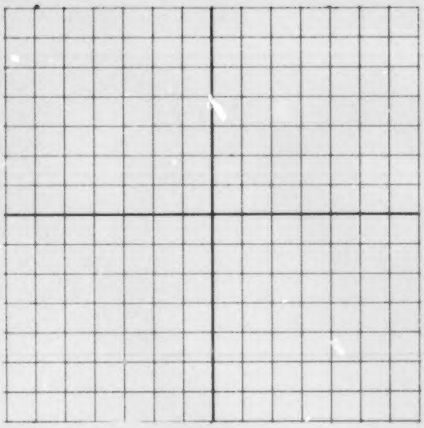


(3)



93. A B

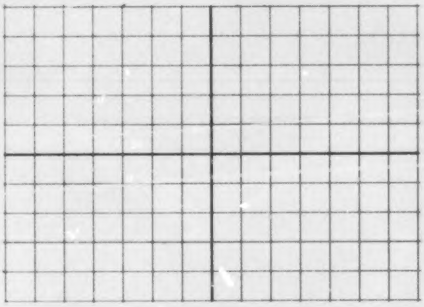
94.



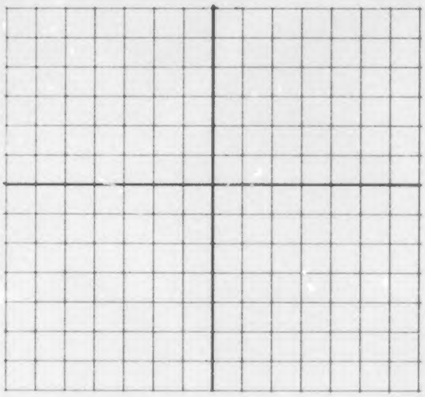
95. ____________

96. ____________

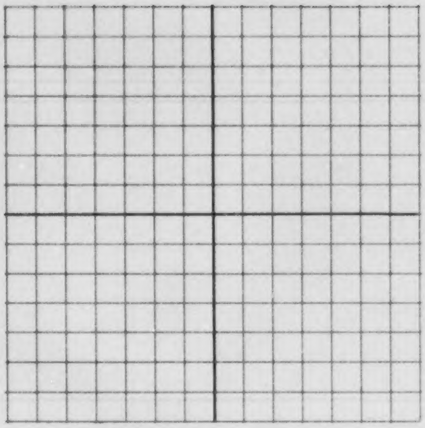
97.



98.



99.



100. ________

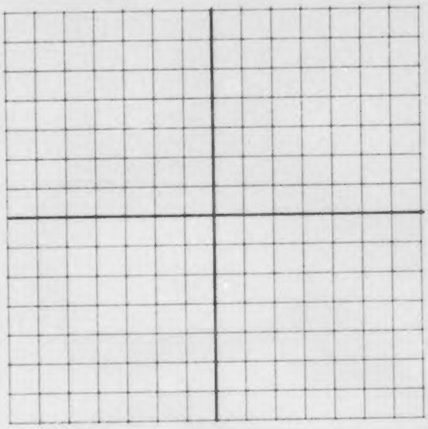
101. ________

102. ________

*103.

x	-5	-3	-3	-1	-1	0	0	1	1	3	3	5
|x|	5					0	0					5
|y|	0					5	5					0
y	0					5	-5					0

*104.

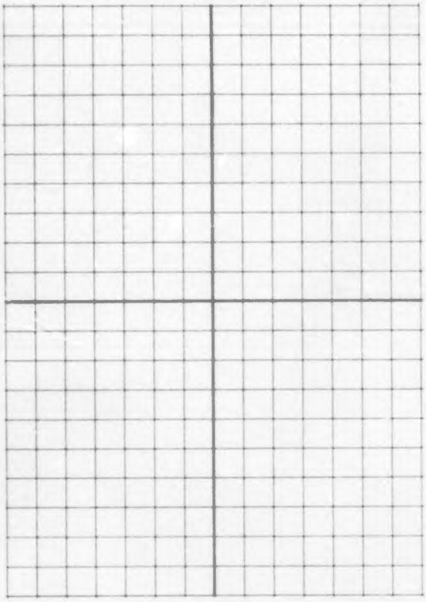


Name ______________________________ Date ______________________

21-3. Graphs of Open Sentences Involving Integers Only

1. __________
2. __________________
3. __________
4. __________
5. __________
6. __________

7.



8. A B C

9. __________
10. __________
11. __________
12. __________
13. __________________
14. __________________
15. __________________

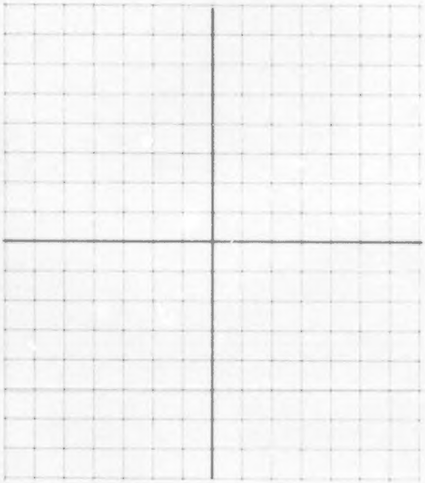
16. __________
17. __________
18. __________
19. __________

20. A B C

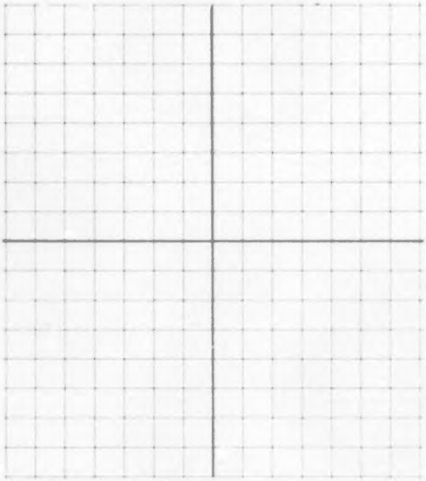
21. A B C

22. A B C

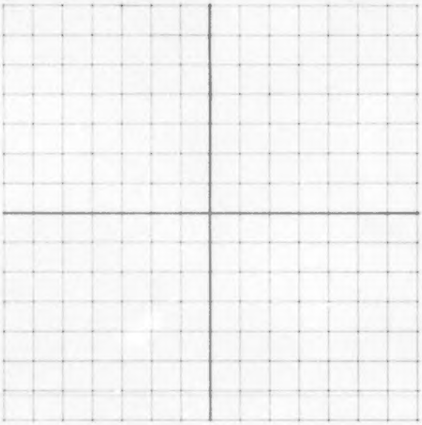
23.



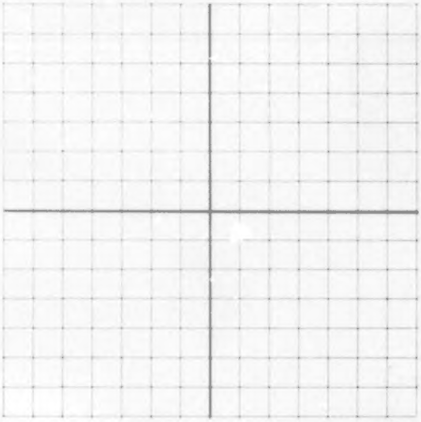
24.



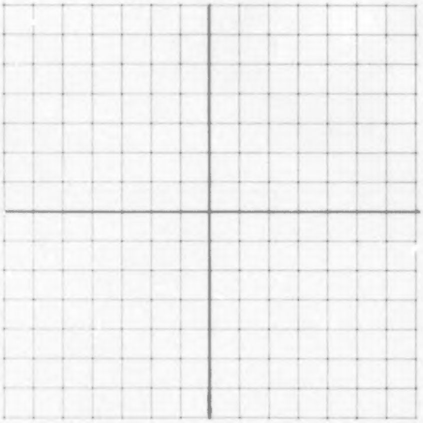
25.



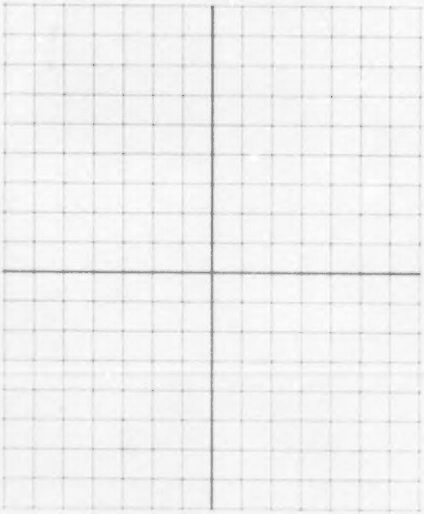
26.



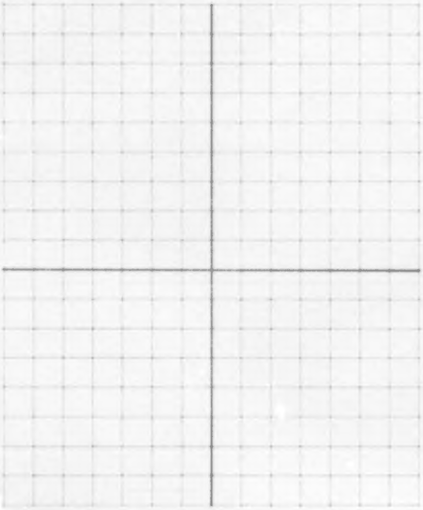
27.



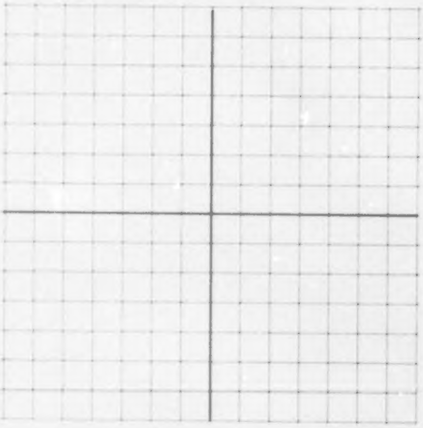
28.



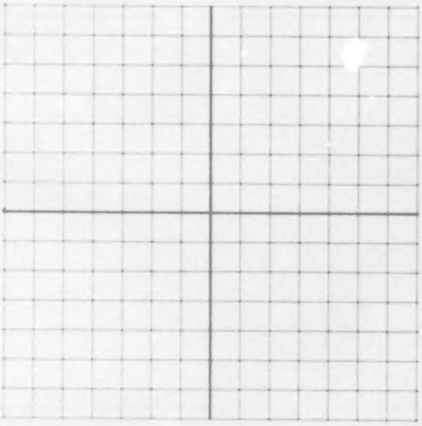
29.



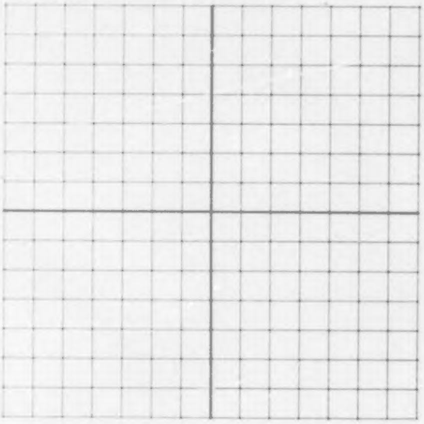
30.



31.



32.



33. ____________

34. ____________

35. ____________

36. ____________

37. ____________

38. ____________

39. ____________

40. ____________

Name ____________________ Date ____________________

22-1. Systems of Equations

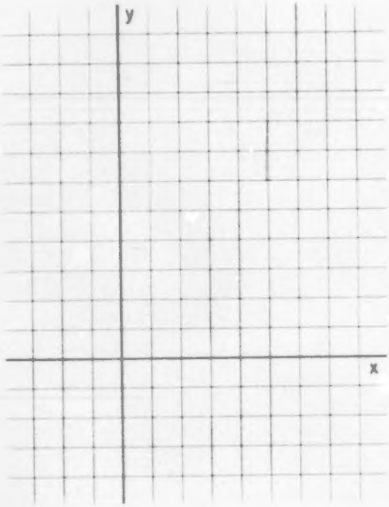
1. A B

2. ____________

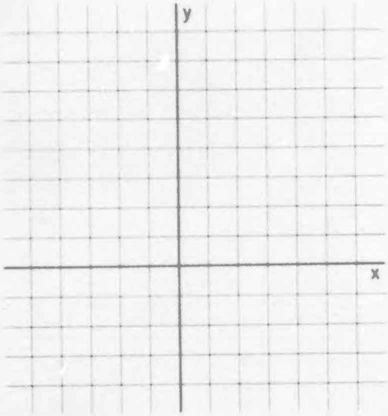
3. ____________

4. ____________

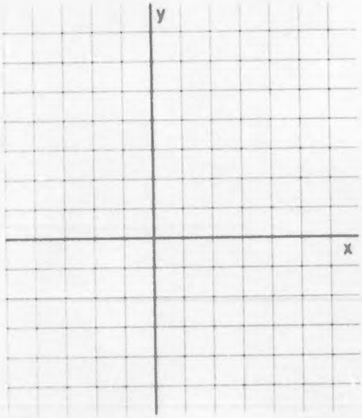
5.



6.



7.



8. ________

9. ________

10. ________

11. ________

12. ________

13. ________

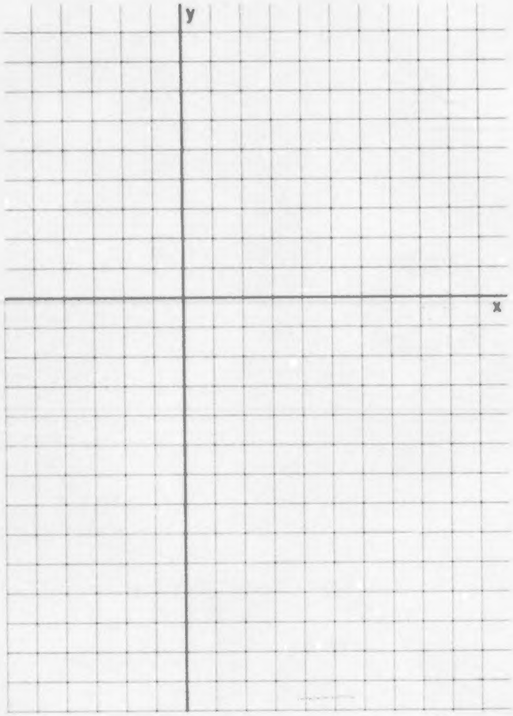
14. ________

15. ____________

16. ________

17. ________

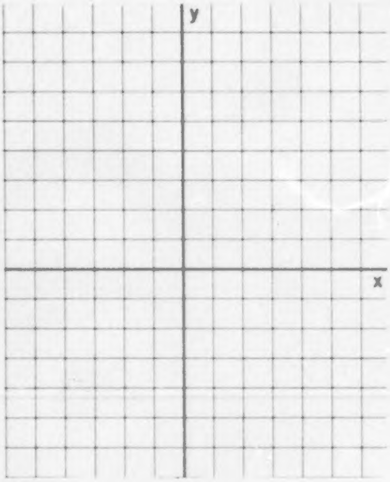
18.



19. ________

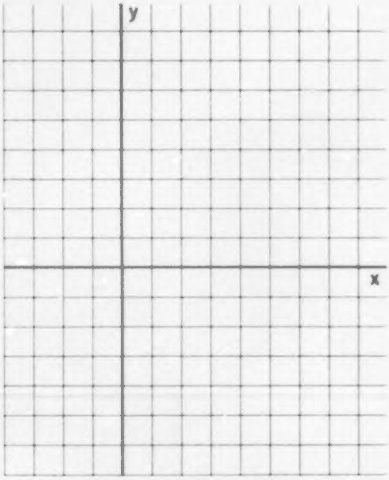
20. ____________

21.

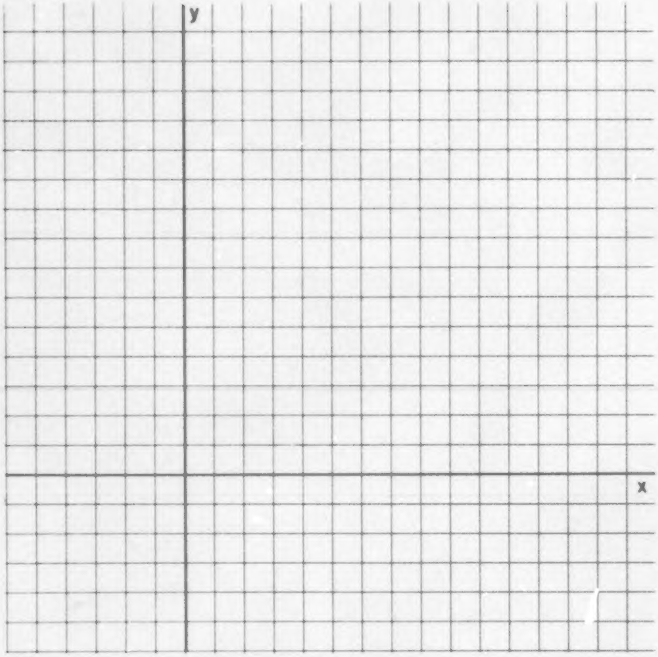


22.

23.



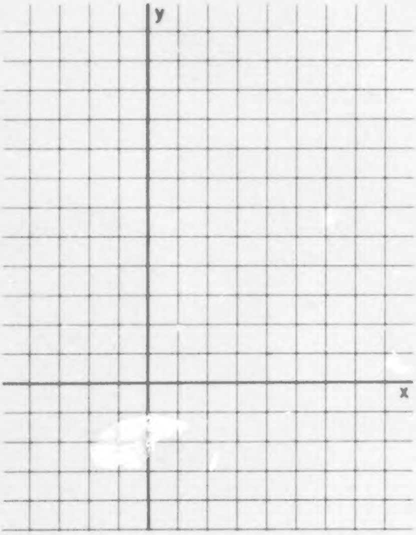
24.



25. ________

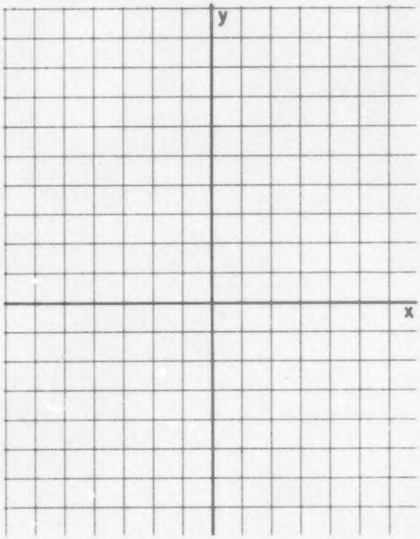
26. ________

27.



28. ______,______

29.



30. ________

31. ________

32. __________
33. __________
34. __________
35. __________

36. _______________
37. _______________
38. _______________
39. _______________
40. _______________
41. _______________
42. _______________
43. __________
44. __________
45. _______________
46. _______________
47. _______________

48. _______________
49. _______________
50. _______________
51. __________
52. __________
53. __________
54. __________

55. _______________
56. _______________

Name ______________________________ Date ____________________

22-2. Systems of Equations (Continued)

1. ________
2. ____________
3. ________
4. ____________
5. ____________
6. ________
7. ________
8. ____________
9. ________

10. ________
11. ____________
12. ____________
13. ________
14. ________
15. ________
16. ________
17. ____________
18. ________
19. ____________
20. ________
21. ________
22. ________
23. ________

24. ____________
25. ____________

26. ________
27. ________
28. ________
29. ________
30. ________
31. ________
32. ________
33. ________

*34. ____________
*35. ____________
*36. ____________
*37. ____________

*38. ________
*39. ____________
*40. ________
*41. ________
*42. ________
*43. ____________
*44. ________
*45. ________

46. ________
47. ________
48. ________
49. ________
50. ________
51. ________

52. ________

53. ________

54. ________

55. ________

56. ________

57. ________ and ________

58. ______ ______ ______

59. ________

60. ________ and ________

*61. ________

*62.

63. ________

64. ________

65. ____________

66. ____________

67. ________

68. ________

69. ________

70. ________

71. ________

72. ________

73. ________

74. ________

75. ________

76. ________

77. ________

78. ________

79. ________

80. ________

81. ________

82. ________

83. ________

84. ________

85. ____________

86. ________

87. ____, ____

88. ________

89. ________

90. ____, ____

91. ____________

92. ____________

93. ____________

94. ________

95. ________

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Name ______________________ Date ______________________

22-3. Parallel and Coincident Lines; Solution by Substitution

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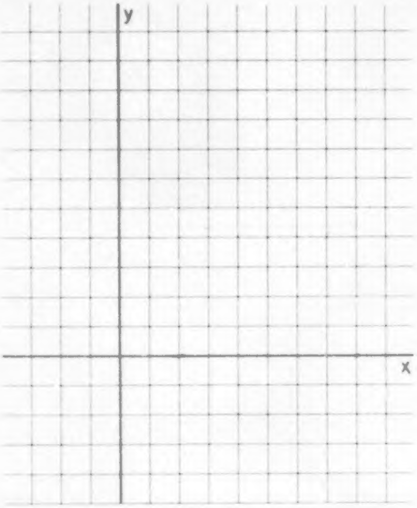

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41. A B C D

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Name ______________________________ Date ______________________

22-4. Systems of Inequalities

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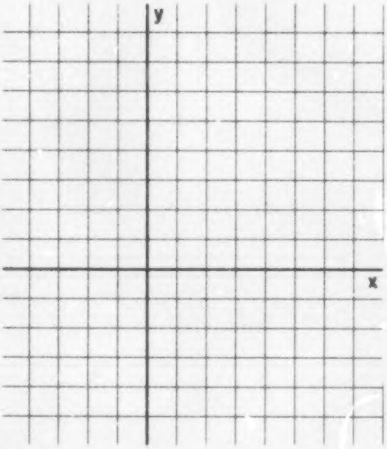
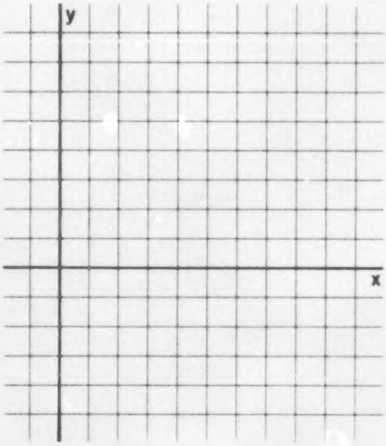
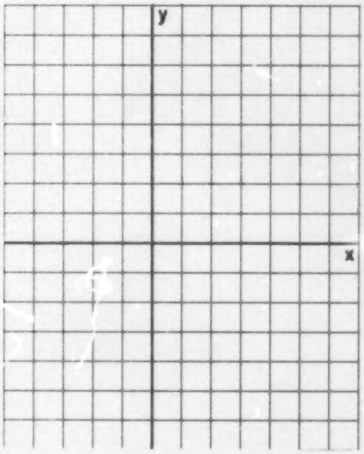


7.



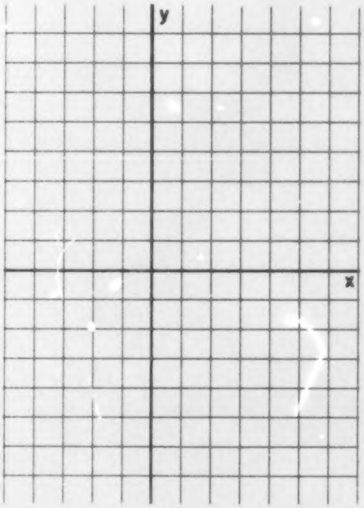
8.



9. A B C D

10. A B C

11.



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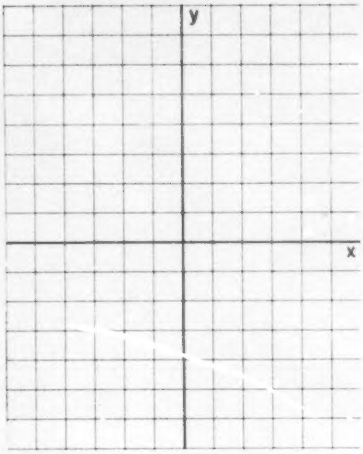

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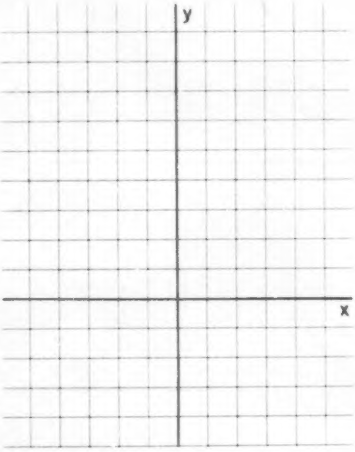

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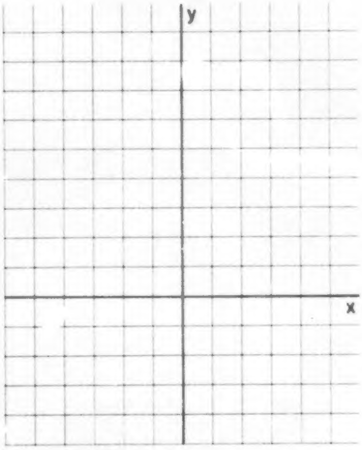

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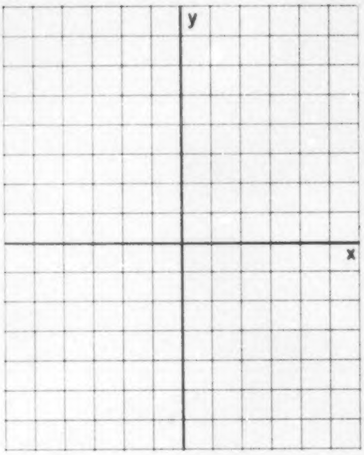

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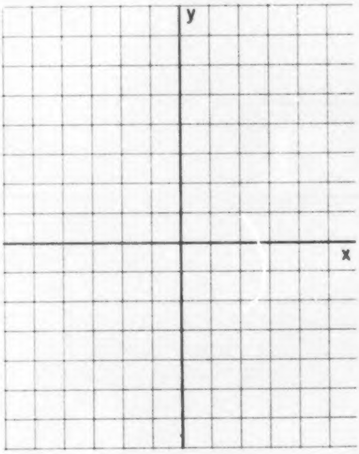

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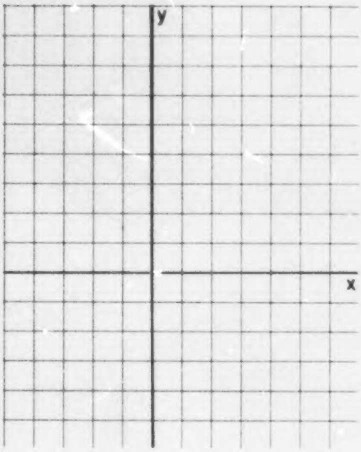
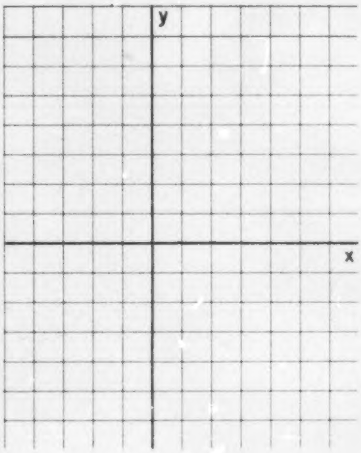
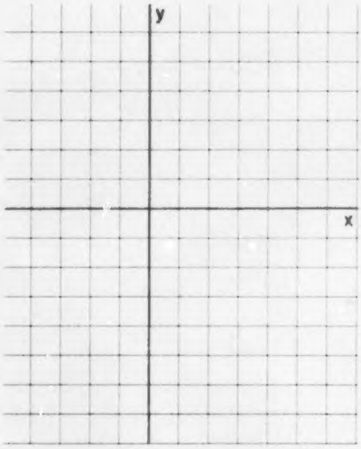


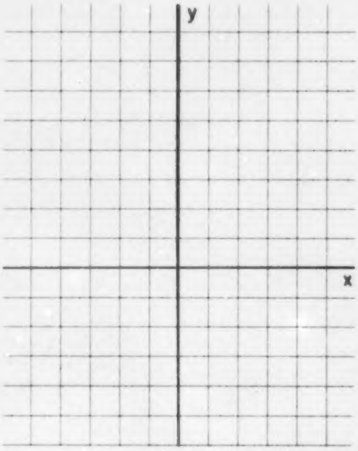
22.



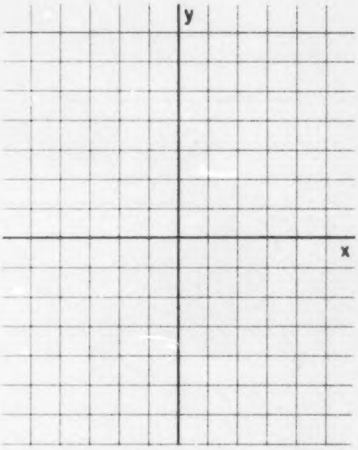
23.



24.



25.



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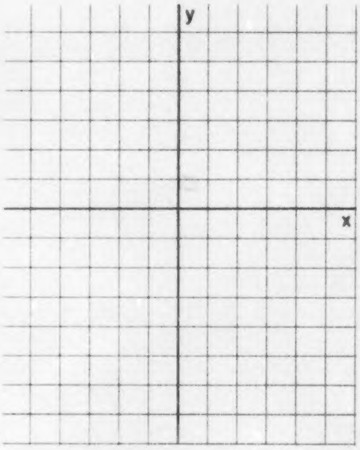
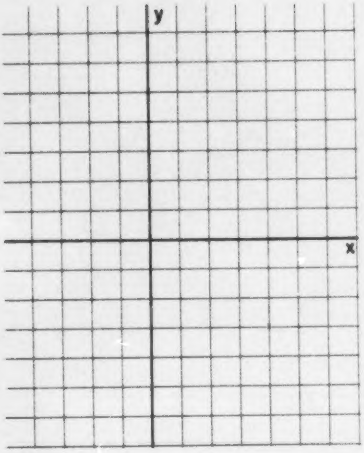
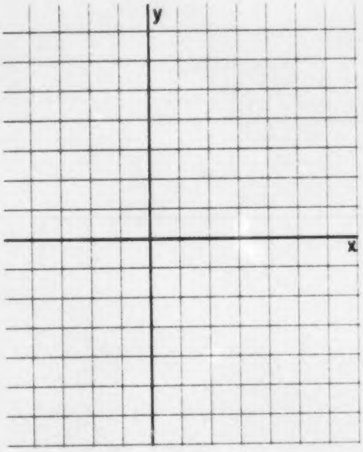


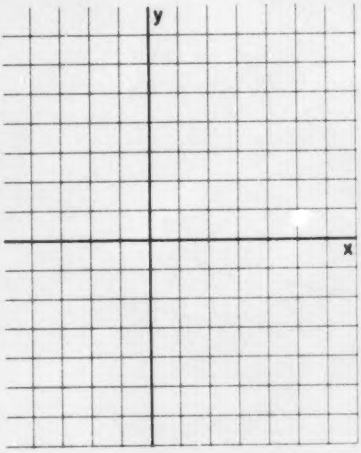
27.



28.



29.



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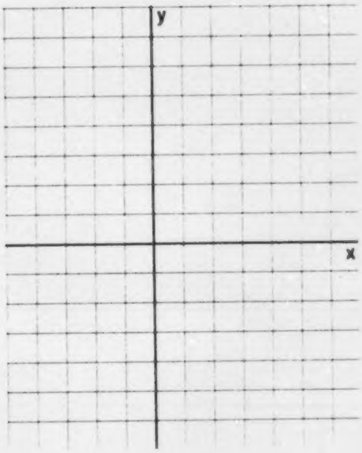

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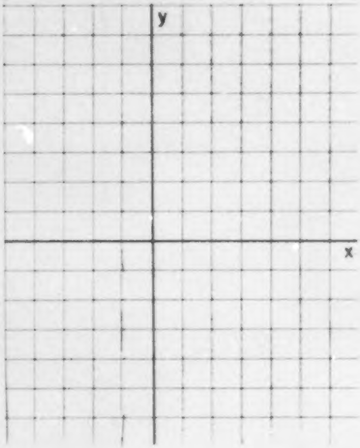

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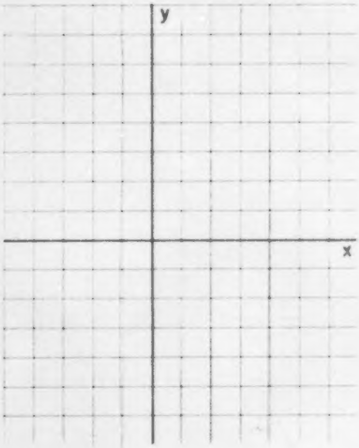

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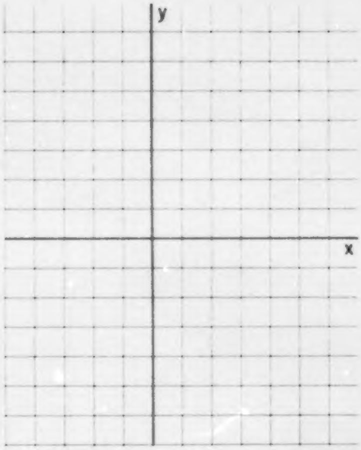

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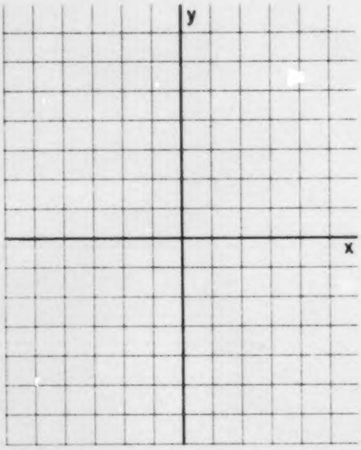
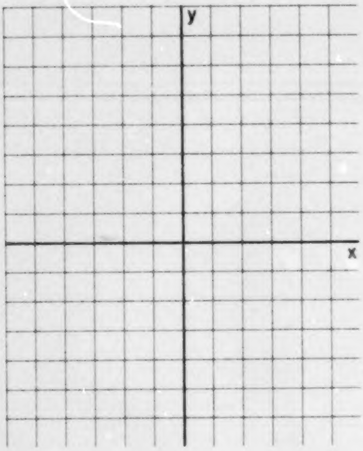
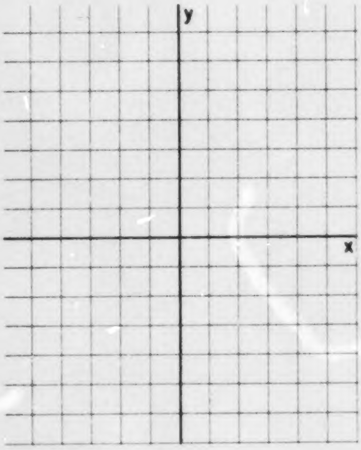


69.



70.



71. __________

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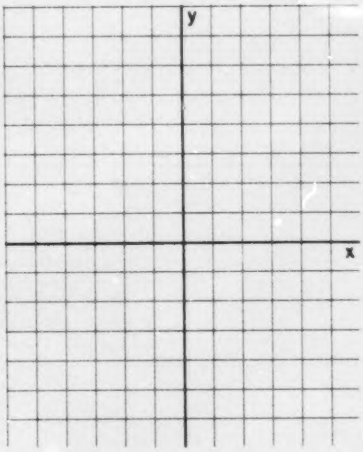
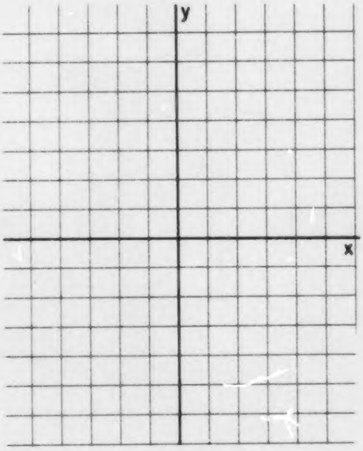
73.



*74.



Name________________________________ Date________________

23-1. Graphs of Equations of the Form $y = ax^2 + k$

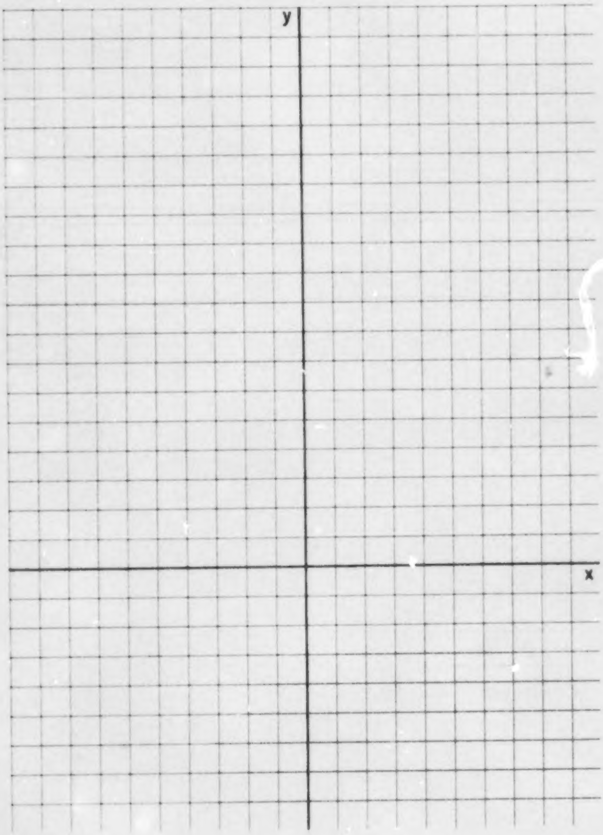
1. ____________

2. ____________

3.

x	-3	-2	-1	$-\frac{1}{2}$	0	$\frac{1}{2}$	1	2	3
y					0				

4.



5. A B

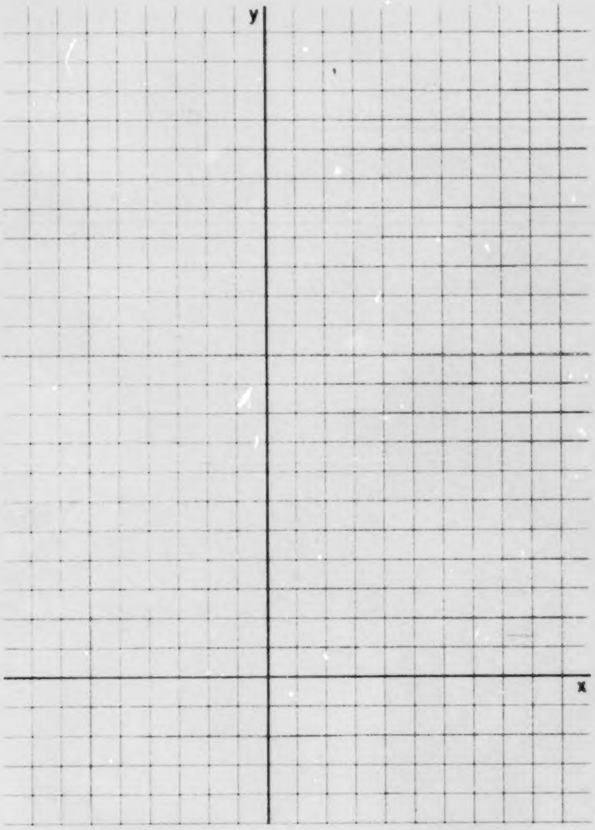
6. ______________

7. ______________

8.

x	-4	-2	$-\frac{3}{2}$	-1	$-\frac{1}{2}$		$\frac{1}{2}$	$\frac{3}{2}$	2	
x^2										
$\frac{1}{2}x^2$										
$2x^2$						0				18

9.



10. ________

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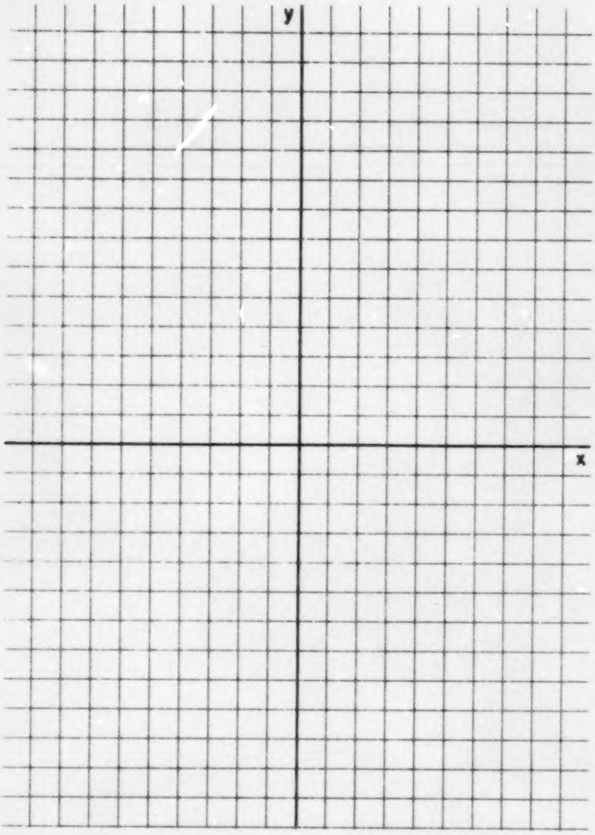

21. A B C

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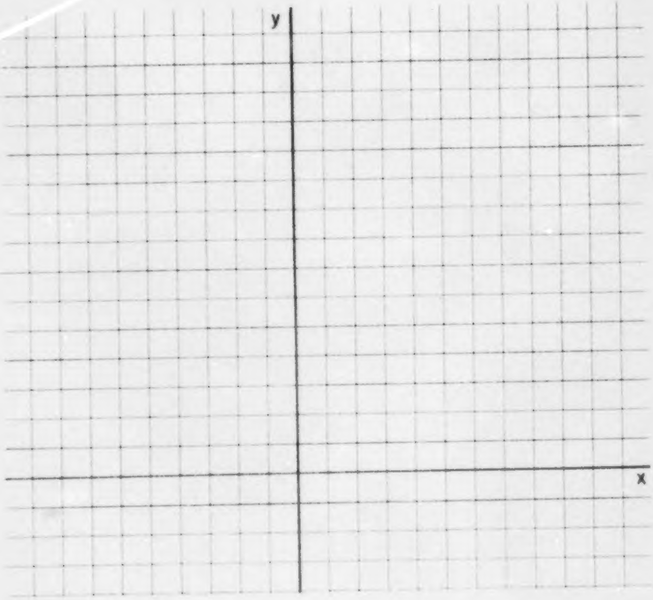
43.

x	-3	-2	-1	$-\frac{1}{2}$	0	$\frac{1}{2}$	1	2	3
x^2									
$x^2 + 3$									

44.



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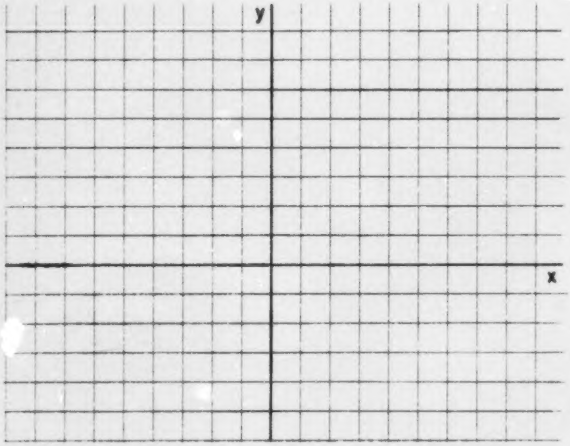


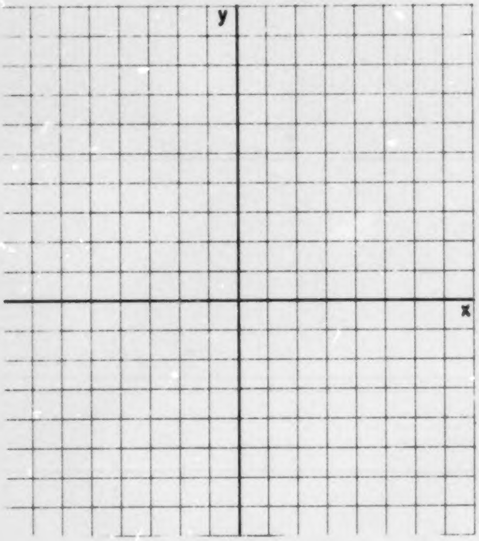
62. ____________

63. ____________

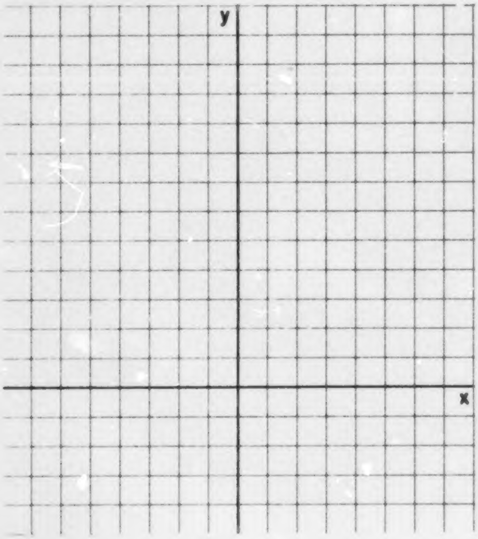
64. ____________

65. ____________ ____________

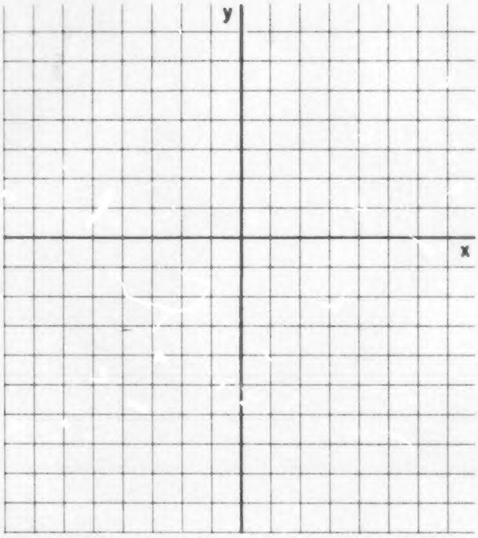
66, 67.



68, 69, 70.



71, 72, 73.



74. ____________

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79. ____________

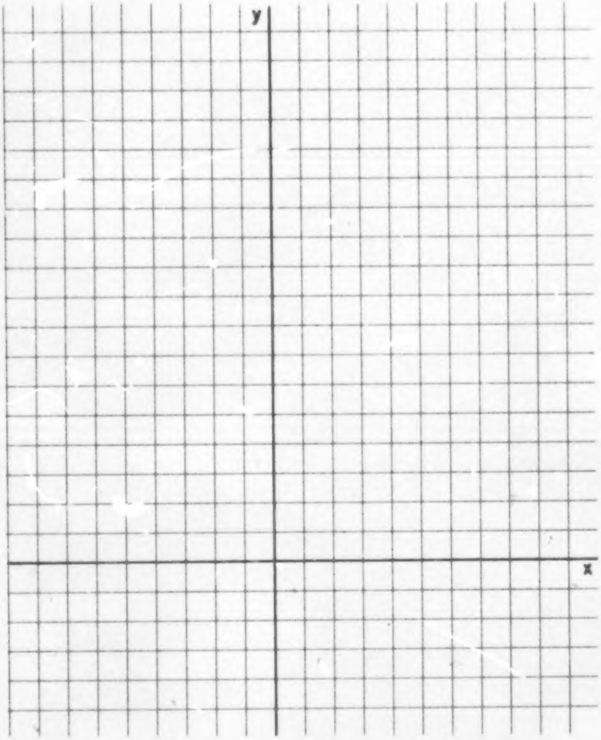
Name ____________________________ Date ____________________

23-2. Graphs of Equations of the Form $y = a(x - h)^2 + k$

1.

x	-2	-1	0	1	2	3	4	5	6
x^2	4								
$(x-3)^2$	25								

2.



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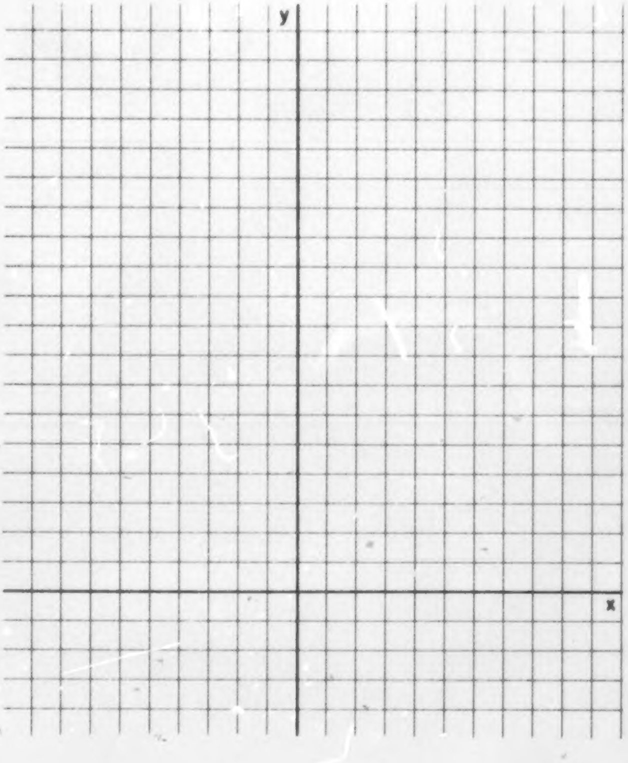

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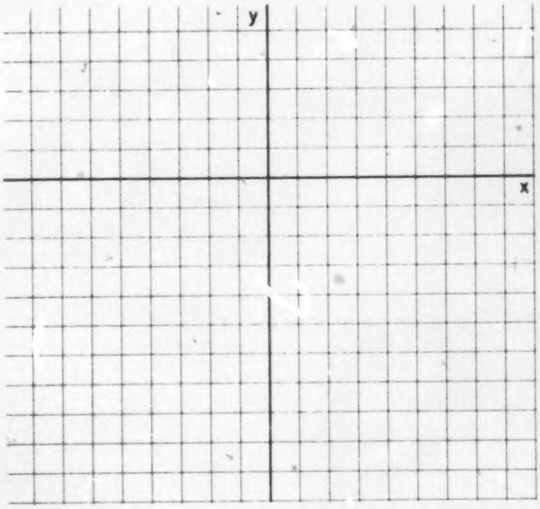
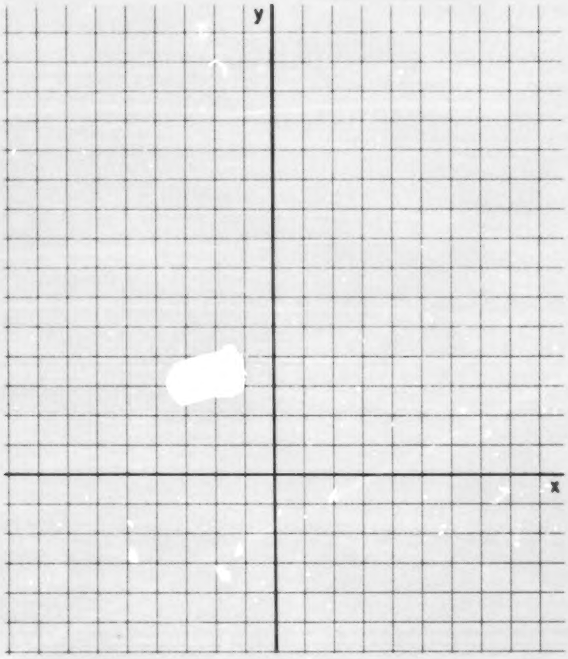


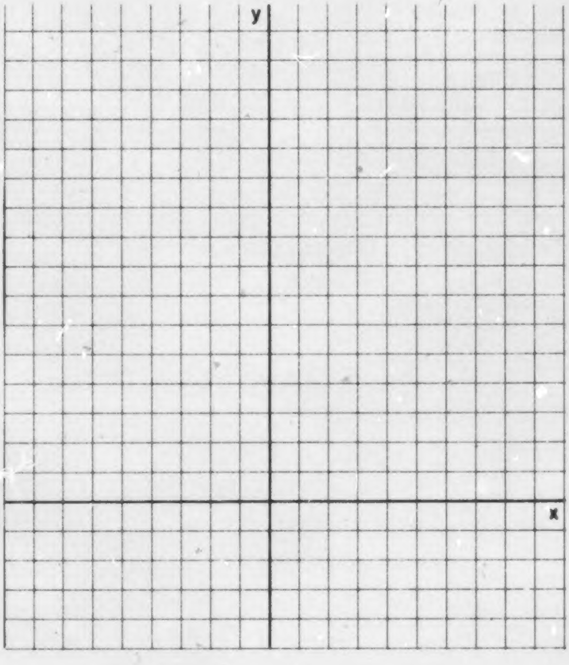
52. ______________

53. ____________________________

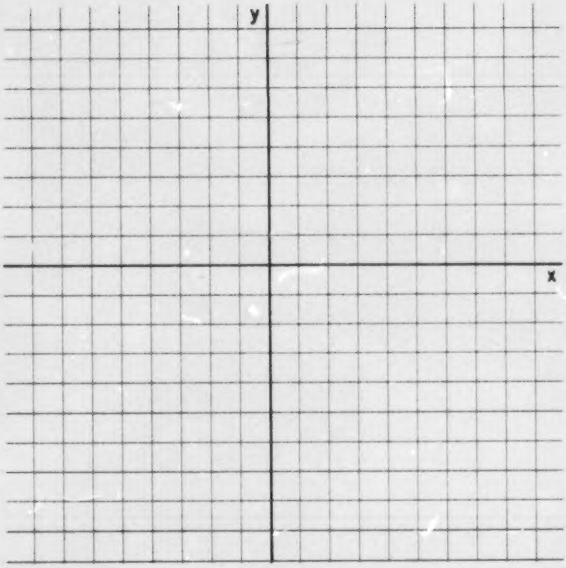
54.



55.



56.



57. ____________________ ____________________

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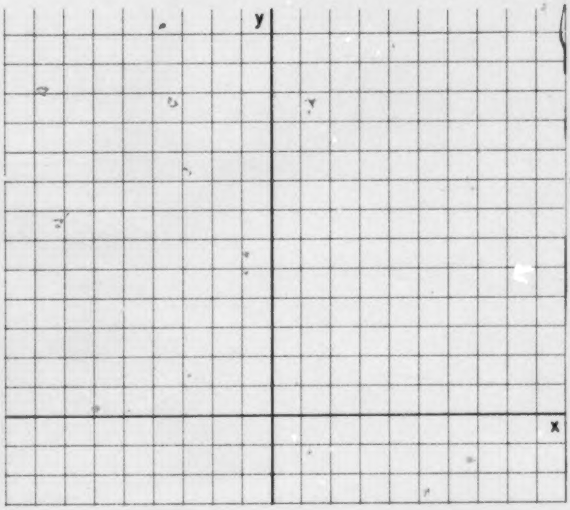
58.



59. ____________________

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Name ______________________________ Date ____________________

23-3. Quadratic Polynomials of the Form $y = ax^2 + bx + c$

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Name ______________________________ Date ____________________

23-4. Summary and Review

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Name ______________________________ Date ____________________

24-1. The Function Concept

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23. A B C D

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60. A B C D

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Name ________________________ Date ____________________

24-2. The Function Notation

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21. ____________

22. A B C

23. ____________
24. ____________
25. ____________
26. ____________
27. ____________
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48. ____________

49. ____________

50. ____________

51. ____________

52. ____________________

53. ____________

54. ____________

55. ____________________

56. ____________________

57. A B C

58. A B C

59. ____________

60. ____________

61. ____________

62. ____________

63. ____________

64. ____________

65. ____________

66. ____________

67. ____________

68. ____________

69. ____________

70. ____________

71. ____________

72. ____________

73. ____________

74. ____________

75. ______________

76. ______________

77. ______________

78. ______________

79. ______________

80. ______________

81. ______________

82. ______________

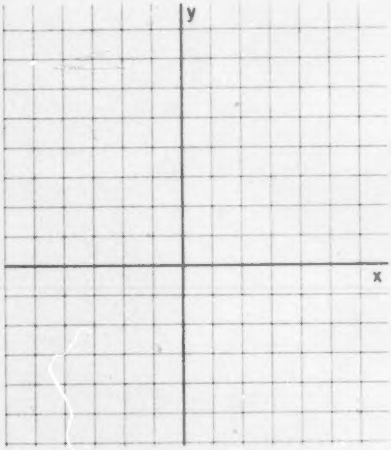
Name______________________________ Date______________________

24-3. Graphs of Functions

1. ______________

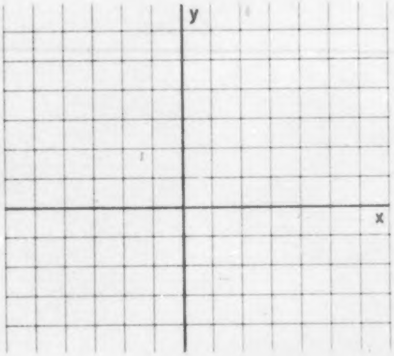
2. ______________

3.

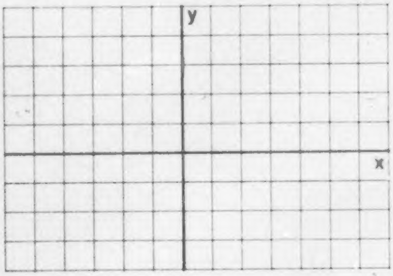


4. A B

5.

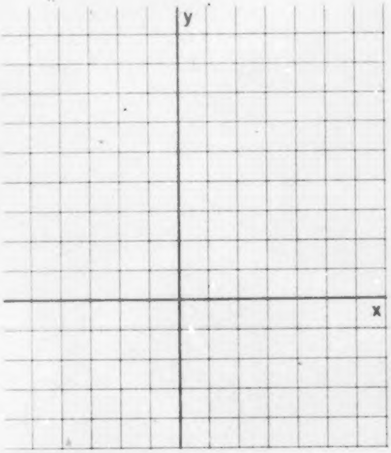


6.



7. A B C

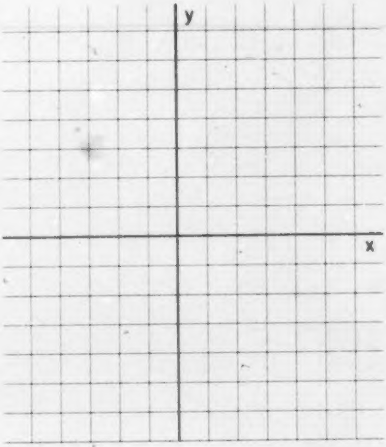
8.



9. ______________

10. ______________

11.



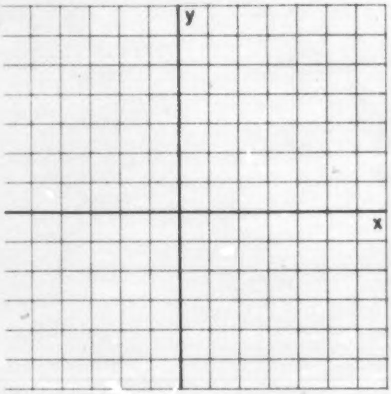
12. ______________

13. ______________

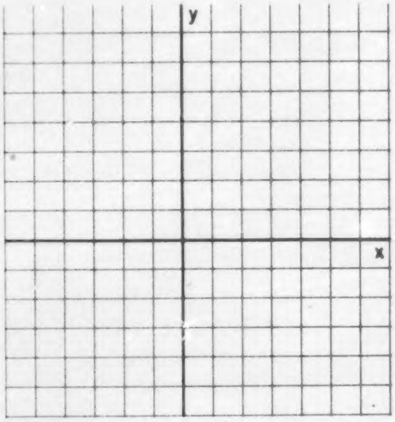
14. ____________

15. ____________

16.



17.



18. ________________

19. ________________

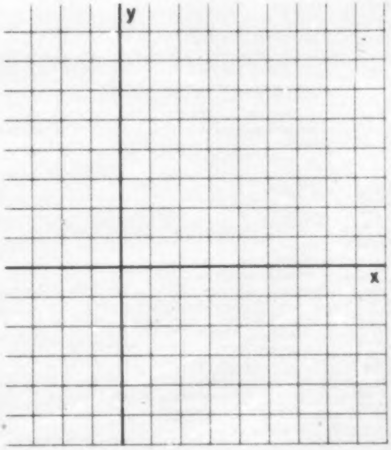
20. ________________

21. ________________

22. ________________

23. ________________

24.



25. ____________

26. ________________

27. ________ ________

28. A B C D

29. ________________

30. ________________

31. ________________

32. ________________

33. ________________

34. ________________

35. ________________

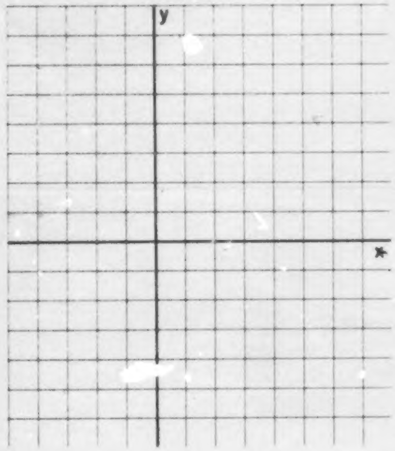
36. ________________

37. ________________

38. A B C D E

39.
40.
41.
42.
43.

44.



45.

Name ______________________________ Date ____________________

24-4. Linear and Quadratic Functions

1. ____________

2. ____________

3. ____________

4. ____________

5. ____________

6. ____________

7. A B

8. A B

9. ____________

10. ____________

11. ____________

12. ____________

13. ____________

14. ____________

15. ____________

16. ____________

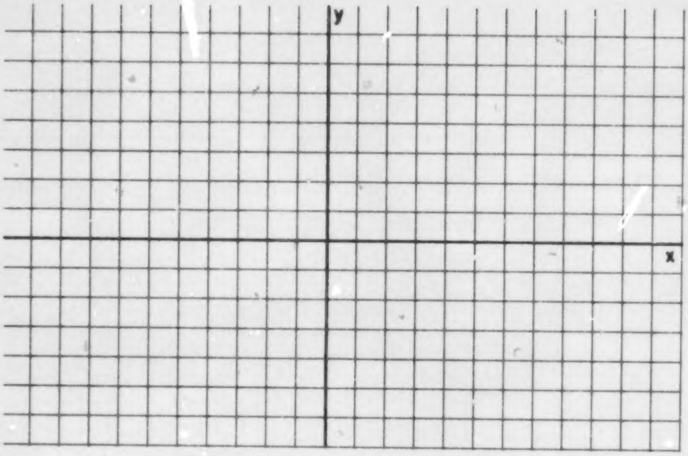
17. ____________

18.

x	$\frac{1}{3}$	$\frac{1}{2}$	1	2	3	4	$-\frac{1}{3}$	$-\frac{1}{2}$	-1	-2	-3	-4
y												

19. A B

20.



21. ____________

22. ____________

23. ____________

24. ____________

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49. ____________

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